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APÉNDICE A

RESUMEN DE CAMBIOS RECIENTES EN LA LEY DE PLANIFICACIÓN ESTATAL

Apéndice A

Resumen de cambios recientes en la ley de planificación estatal

Consulta tribal

La intención del Proyecto de Ley del Senado (SB) 18 es brindar a las tribus nativas americanas de California la oportunidad de participar en las decisiones locales sobre el uso de la tierra en una etapa temprana de planificación, con el propósito de proteger o mitigar los impactos a los lugares culturales. El propósito de involucrar a las tribus en estas etapas tempranas de planificación es permitir la consideración de lugares culturales en el contexto de una política local amplia de uso de la tierra, antes de que el gobierno local tome decisiones de uso de la tierra a nivel de proyecto y específicas para cada sitio.

SB 18 requiere que los gobiernos locales consulten con las tribus antes de tomar ciertas decisiones de planificación y notifiquen a las tribus en ciertos puntos clave del proceso de planificación. Estos requisitos de consulta y notificación se aplican a la adopción y enmienda de planes generales (definidos en el Código de Gobierno §65300 et seq.) Y planes específicos (definidos en el Código de Gobierno §65450 et seq.). Aunque SB 18 no menciona específicamente los requisitos de consulta o notificación para la adopción o enmienda de planes específicos, la ley de planificación estatal existente requiere que los gobiernos locales utilicen los mismos procesos para la adopción y enmienda de planes específicos que para los planes generales (ver Código de Gobierno §65453). Por lo tanto, cuando la SB 18 requiere consulta y / o notificación para la adopción o enmienda de un plan general, el requisito se extiende también a la adopción o enmienda de un plan específico. Aunque la nueva ley entró en vigor el 1 de enero de 2005, varias de sus disposiciones sobre consultas y avisos tribales no entraron en vigor hasta el 1 de marzo de 2005.

Emisiones de gases de efecto invernadero y adaptación al clima

emisiones de gases de efecto invernadero

Proyecto de ley 32 de la Asamblea sobre. En septiembre de 2006, la Legislatura del Estado de California promulgó la Ley de Soluciones al Calentamiento Global de California de 2006, también conocida como AB 32. AB 32 requiere que las emisiones de GEI en todo el estado se reduzcan a los niveles de 1990 para 2020.

Proyecto de Ley del Senado 32. A partir del 1 de enero de 2017, SB 32 requiere que California reduzca sus emisiones de GEI en todo el estado para el año 2030, de modo que estén un 40 por ciento por debajo de las que ocurrieron en 1990.

Estándar de cartera de energías renovables de California. En 2015, la Legislatura promulgó la SB 350, que incorpora una política que fomenta un aumento sustancial en el uso de vehículos eléctricos y aumentó el Estándar de cartera renovable para requerir que el 50 por ciento de la electricidad generada sea a partir de energías renovables para 2030.

El 10 de septiembre de 2018, el ex El gobernador Brown promulgó la ley SB 100 y la Orden Ejecutiva B-55-18. SB 100 eleva el requisito del Estándar de Cartera Renovable de California al 50 por ciento del objetivo de recursos renovables para el 31 de diciembre de 2026 y para lograr un objetivo del 60 por ciento para el 31 de diciembre de 2030. SB 100 también requiere que los vendedores minoristas y las empresas de servicios eléctricos locales adquieran una cantidad mínima de productos eléctricos de recursos de energía renovable elegibles para que el total de kilovatios hora de esos productos vendidos a sus clientes minoristas de uso final alcance el 44 por ciento de las ventas minoristas para el 31 de diciembre de 2024, el 52 por ciento para el 31 de diciembre de 2027 y el 60 por ciento para diciembre 31, 2030. La Orden Ejecutiva B-55-18 establece una meta de neutralidad de carbono para California para 2045; y establece el objetivo de mantener las emisiones negativas netas a partir de entonces.

Proyecto de ley 1493 de la Asamblea, Normas de Pavley Clean Cars. En julio de 2002, la Legislatura promulgó AB 1493 (Proyecto de Ley Pavley), que requiere la máxima reducción factible de GEI emitidos por vehículos de pasajeros y camiones ligeros a partir del año modelo 2009. En septiembre de 2009, CARB adoptó enmiendas a las normas Pavley para reducir Emisiones de GEI de vehículos de motor nuevos hasta el año modelo 2016. Estas regulaciones crearon lo que comúnmente se conoce como los "estándares Pavley II".

Coches limpios avanzados. En enero de 2012, CARB adoptó un programa de Autos Limpios Avanzados destinado a reducir tanto los contaminantes que causan el smog como las emisiones de GEI para los modelos de vehículos de los años 2017-2025. Las regulaciones se enfocan en aumentar sustancialmente el número de autos híbridos enchufables y vehículos de emisión cero en la flota de vehículos y en hacer que combustibles como la electricidad y el hidrógeno estén fácilmente disponibles para estas tecnologías de vehículos. Se espera que las regulaciones de Autos Limpios Avanzados reduzcan las emisiones de GEI de los vehículos de pasajeros de California en aproximadamente un 34 por ciento por debajo de los niveles de 2016 para 2025, al tiempo que mejoran la eficiencia del combustible y reducen los costos de los conductores.

Proyecto de ley del Senado 375, Estrategia de comunidades sostenibles. La SB 375, firmada en agosto de 2008, requiere que se incluyan estrategias comunitarias sostenibles en los planes regionales de transporte para reducir las emisiones de GEI. En 2013, la Comisión de Transporte Metropolitano de la Bahía de San Francisco y la Asociación de Gobiernos del Área de la Bahía aprobaron conjuntamente el Plan Área de la Bahía, que incluye la Estrategia de Comunidades Sostenibles de la región y el Plan de Transporte Regional 2040. Plan Bay

Area incluye el objetivo de reducir los GEI a un siete por ciento por debajo de los niveles de emisiones de 2005 para 2020, y un 15 por ciento por debajo de los niveles de 2005 para 2035.

Código de Energía de California. El Código de Energía de California (Código de Regulaciones de California, Título 24, Parte 6), que se incorpora al Código de Normas de Construcción de California, se estableció por primera vez en 1978 en respuesta a un mandato legislativo para reducir el consumo de energía de California. El Código de Energía de California es actualizado cada tres años por la Comisión de Energía de California como BEES para permitir la consideración y posible incorporación de nuevas tecnologías de eficiencia energética y métodos de construcción. Las BEES 2019 actuales entraron en vigencia el 1 de enero de 2020. Los edificios residenciales y no residenciales permitidos después del 1 de enero de 2020 deben cumplir con las BEES 2019. Los BEES 2019 están estructurados para lograr el objetivo del estado de que todos los nuevos edificios residenciales de poca altura (viviendas unifamiliares) tengan energía neta cero. Las casas multifamiliares y los edificios no residenciales utilizarán aproximadamente un 30 por ciento menos de energía en comparación con las BEES de 2016 (Comisión de Energía de California 2018).

Código de normas de construcción ecológica de California. El propósito de los Estándares de Construcción Ecológica de California, que entraron en vigencia el 1 de enero de 2011, es mejorar el diseño y la construcción de los edificios para reducir los impactos ambientales negativos a través de prácticas de construcción sustentable. Los Estándares de Construcción Ecológica de California de 2019 instituyeron estándares de desempeño ambiental obligatorios y voluntarios para todas las construcciones nuevas desde cero de usos residenciales comerciales de baja altura y edificios de propiedad estatal, así como escuelas y hospitales.

Energy

Códigos de construcción deCalifornia. Los Estándares de eficiencia energética de California para edificios residenciales y no residenciales (Código de regulaciones de California, Título 24, Parte 6) se establecieron por primera vez en 1978 para reducir el consumo de energía de California. El Código de Energía de California es actualizado cada tres años por la Comisión de Energía de California como BEES. Adoptado por la Comisión de Energía de California en mayo de 2018, el BEES 2019 entró en vigencia el 1 de enero de 2020. Los BEES 2019 están estructurados para lograr el objetivo del estado de que todos los nuevos edificios residenciales de baja altura (viviendas unifamiliares) tengan energía neta cero. . Las casas multifamiliares y los edificios no residenciales construidos para las BEES de 2019 utilizarán aproximadamente un 30 por ciento menos de energía en comparación con las BEES de 2016 (Comisión de Energía de California 2018). El Código de Normas de Construcción de California se puede hacer cumplir a nivel de proyecto.

El Código de Normas de Construcción Ecológica (también conocido como CALGreen), que requiere que todos los edificios nuevos en el estado sean más eficientes energéticamente y ambientalmente responsables, se actualizó por última vez en julio de 2019. Estas regulaciones integrales están destinadas a lograr reducciones importantes en interiores y exteriores Consumo energético del edificio.

Proyecto de Ley 1493 de la Asamblea (Regla Pavley I). La AB 1493 fue promulgada el 22 de julio de 2002. Requiere que CARB desarrolle y adopte regulaciones que mejoren la eficiencia de combustible de los vehículos y camiones ligeros. Los requisitos de Pavley I se aplican a estos vehículos en los modelos de los años 2009 a 2016.

Legislación / Órdenes de energía renovable. El Programa Estándar de Cartera Renovable de California, que requiere que las empresas de servicios eléctricos y otras entidades bajo la jurisdicción de la Comisión de Servicios Públicos de California cumplan con el 20 por ciento de sus ventas minoristas con energía renovable para 2017, fue establecido por SB 1078 en 2002. El programa se expandió posteriormente por el estándar de electricidad renovable en septiembre de 2010, lo que requiere que todas las empresas de servicios públicos cumplan con un objetivo del 33 por ciento para 2020. El 10 de septiembre de 2018, el ex gobernador Brown promulgó la ley SB 100 y la Orden Ejecutiva B-55-18. SB 100 eleva el requisito del Estándar de Cartera Renovable de California al 50 por ciento para el 31 de diciembre de 2026 y al 60 por ciento para el 31 de diciembre de 2030. La Orden Ejecutiva B-55-18 establece una meta de neutralidad de carbono para California para 2045 y una meta de mantener un nivel neto negativo emisiones a partir de entonces.

Proyecto de ley del Senado 743. A partir del 1 de julio de 2020, SB 743 actualiza la forma en que se miden los impactos del transporte en California para nuevos proyectos de desarrollo, asegurándose de que se construyan de una manera que permita a los californianos tener más opciones para conducir menos. SB 743 ayudará a California a lograr sus compromisos climáticos, preservar el medio ambiente, mejorar la salud y la seguridad e impulsar su economía al priorizar los trabajos, los servicios y la vivienda que comparten el edificio. SB 743 también reducirá el tiempo empleado en los vehículos para llegar a los lugares, reduciendo así el consumo de combustible.

justicia ambiental

Comunidad en desventaja de

Según los hallazgos legislativos del Proyecto de Ley del Senado (SB) 244, cientos de comunidades no incorporadas en California carecen de acceso a infraestructura comunitaria básica como aceras, agua potable y procesamiento de desechos adecuado. Estas comunidades van desde asentamientos remotos en todo el estado hasta vecindarios que han estado rodeados por las ciudades de rápido crecimiento de California, pero que no forman parte de ellas. Esta falta de inversión amenaza la salud y la seguridad de los residentes y

fomenta la desigualdad económica, social y educativa. Además, cuando esta falta de atención y recursos se convierte en una práctica estándar, puede crear una matriz de barreras que es difícil de superar.

El propósito de la SB 244, aprobada por el gobernador del estado y presentada ante la Secretaría de Estado el 7 de octubre de 2011, es comenzar a abordar las complejas barreras legales, financieras y políticas que contribuyen a la inequidad regional y los déficits de infraestructura dentro de las comunidades desfavorecidas no incorporadas. . La inclusión de estas comunidades en la planificación a largo plazo de una ciudad o condado, como lo requiere la SB 244, resultará en un sistema de entrega de servicios e infraestructura más eficiente que incluye, entre otros, alcantarillado, agua y protección estructural contra incendios. A su vez, la inversión en estos servicios e infraestructura resultará en la mejora y protección de la salud pública y la seguridad de estas comunidades.

Salud comunitaria

La adopción de un elemento de salud es consistente con la sección 65303 del Código de Gobierno. Tener un elemento de salud separado tiene beneficios porque puede ser más fácil para el público y los tomadores de decisiones ver las políticas relacionadas con la salud en un solo lugar. Al mismo tiempo, un enfoque integrado coloca las políticas relacionadas con la salud en los elementos que abordan esos problemas. Además, algunas jurisdicciones incorporan consideraciones de salud específicas en el elemento de vivienda. Dado que este elemento a menudo se actualiza con mayor frecuencia, brinda una oportunidad para una evaluación más regular de la implementación y el progreso de las políticas. Independientemente del enfoque, las políticas relacionadas con la salud deben cumplir con la regla de coherencia interna establecida en la Sección 65300.5 del Código de Gobierno. En última instancia, el mejor formato dependerá del contexto local, los fondos disponibles y el interés de la comunidad, y debe complementar la actualización y la visión general del plan general.

Seguridad contra incendios forestales

Varios requisitos y recursos federales y estatales que abordan la planificación y mitigación del peligro de incendios se describen a continuación:

Estrategia nacional cohesiva de manejo de incendios forestales

En respuesta a los requisitos de la Ley Federal de Asistencia, Manejo y Mejoramiento de Tierras (FLAME) de 2009, las El Fire Leadership Council (WFLC) dirigió el desarrollo de la Estrategia Cohesiva Nacional de Manejo de Incendios Forestales (Estrategia Cohesiva). La Estrategia Cohesiva es un proceso de colaboración con la participación activa de todos los niveles de organizaciones gubernamentales y no gubernamentales, así como del público, para buscar soluciones nacionales y globales para los problemas de manejo de incendios forestales. La estrategia tiene una orientación regional y una base científica.

Plan Estratégico de Incendios de California 2010 El Plan de Incendios de

California es la hoja de ruta del estado para reducir el riesgo de incendios forestales. El Plan contra Incendios es un esfuerzo cooperativo entre la Junta Estatal de Silvicultura y Protección contra Incendios y el Departamento de Silvicultura y Protección contra Incendios de California. Al hacer hincapié en lo que se debe hacer mucho antes de que comience un incendio, el Plan contra incendios busca reducir los costos de extinción de incendios y las pérdidas de propiedad, aumentar la seguridad de los bomberos y contribuir a la salud general del ecosistema. Los objetivos centrales que son fundamentales para reducir y prevenir los impactos del fuego giran en torno tanto a los esfuerzos de extinción como a los de prevención de incendios.

Proyecto de ley del Senado 1241 (Estatutos de 2012, Kehoe)

Hay muchas oportunidades para abordar la protección contra incendios, la prevención de incendios y la mitigación de riesgos en el Plan General, más obviamente en el elemento de seguridad que se ocupa de todo tipo de peligros naturales y provocados por el hombre para la vida. y propiedad. Desafortunadamente, el peligro de incendios forestales se minimiza con demasiada frecuencia en el Plan General. La creciente población de California y la expansión del desarrollo en áreas previamente no desarrolladas está creando más problemas de "interfaz urbano-forestal" (WUI) con un correspondiente aumento del riesgo de pérdida de vidas humanas, recursos naturales y activos económicos asociados con los incendios forestales. El clima cambiante, específicamente el aumento de las temperaturas y la creciente variabilidad temporal de la disponibilidad de agua, está aumentando sustancialmente el riesgo de incendios forestales en muchas áreas.

Para abordar la creciente "interfaz urbano-forestal", el Proyecto de Ley del Senado 1241 (Kehoe, Estatutos de 2012) revisó los requisitos de elementos de seguridad para áreas de responsabilidad estatal y zonas de muy alto riesgo de incendio (Secciones 65302 y 65302.5 del Código de Gobierno). Específicamente, durante la próxima revisión del elemento de vivienda en o después del 1 de enero de 2014, el elemento de seguridad se revisará y actualizará según sea necesario para abordar el riesgo de incendio en áreas de responsabilidad estatal y zonas de muy alto riesgo de incendio.

El Código de Gobierno 65302 (g) (3) establece

que en la próxima revisión del elemento de vivienda a partir del 1 de enero de 2014, el elemento de seguridad se revisará y actualizará según sea necesario para abordar el riesgo de incendio en terrenos clasificados como áreas de responsabilidad estatal. , tal como se define en la Sección 4102 del Código de Recursos públicos, y las zonas clasificadas como zonas de severidad de riesgo muy alto de fuego, como se define en la Sección 51177.

Reurbanización

AB-11 Comunidad Ley de Reurbanización de 2019

existente Ley disuelto agencias de reurbanización partir del 1 de febrero del 2012, y designa agencias sucesoras para actuar como entidades sucesoras de las agencias de reurbanización disueltas.

Este proyecto de ley, la Ley de Reurbanización Comunitaria de 2019, autorizaría a una ciudad o condado, o dos o más ciudades actuando conjuntamente, a proponer la formación de una agencia de infraestructura y viviendas asequibles mediante la adopción de una resolución de intención que cumpla con los requisitos especificados, incluyendo que la resolución de la intención incluye una disposición de traspaso y una disposición de traspaso, según se define. El proyecto de ley requeriría que la ciudad o el condado presente esa resolución a cada entidad tributaria afectada y autorizaría a una entidad que reciba esa resolución a optar por no recibir un pago de transferencia, según lo dispuesto. El proyecto de ley requeriría que la ciudad o condado que adoptó esa resolución celebre una audiencia pública sobre la propuesta para considerar todas las objeciones escritas y orales a la formación, así como cualquier recomendación de las entidades tributarias afectadas, y autorizaría a esa ciudad o condado a adoptar una resolución de formación al término de dicha audiencia. El proyecto de ley entonces requeriría que la ciudad o el condado presenten la resolución de intención al Consejo de Crecimiento Estratégico para que determine si la agencia promoverá las metas de reducción de gases de efecto invernadero en todo el estado. El proyecto de ley requeriría que el consejo apruebe la formación de la agencia si determina que la formación de la agencia tanto:

1. No daría lugar a un impacto fiscal estatal, determinado según lo especificado por el Contralor, que exceda una cantidad especificada; y
2. Promovería las metas de reducción de gases de efecto invernadero en todo el estado.

El proyecto de ley consideraría que existe una agencia a partir de la fecha de aprobación del consejo. El proyecto de ley requeriría que el consejo establezca un programa para brindar asistencia técnica a una ciudad o condado que desee formar una agencia de conformidad con estas disposiciones.

Complete Streets

SB-127 Financiamiento del transporte: Transporte activo: Calles completas (2019-2020)

(1) La ley existente establece que el Departamento de Transporte tiene total posesión y control sobre las carreteras del estado y es responsable de preparar la Operación de Carreteras Estatales y Programa de protección para el gasto de fondos de transporte para

mejoras de capital importantes que son necesarias para preservar y proteger el sistema de carreteras del estado.

Este proyecto de ley requeriría que el plan de gestión de activos priorice la implementación de instalaciones seguras y conectadas para peatones, ciclistas y usuarios del tránsito en todos los proyectos del Programa de Protección y Operación de Carreteras Estatales, según se especifica. El proyecto de ley requeriría que el departamento incluya elementos de calles completos en el plan de gestión de activos, según se especifica.

El proyecto de ley requeriría que la comisión, en relación con el plan de gestión de activos, adopte medidas de desempeño que incluyan las condiciones de las instalaciones para bicicletas y peatones, accesibilidad y seguridad para peatones, ciclistas y usuarios de tránsito en el sistema de carreteras del estado. El proyecto de ley requeriría que el informe de desempeño en lenguaje sencillo desarrollado por el departamento, en consulta con la comisión, incluya una descripción de las instalaciones para peatones y bicicletas en cada proyecto, incluyendo el número, extensión y tipo de elementos.

El proyecto de ley requeriría que el departamento, comenzando con el Programa de Protección y Operación de Carreteras Estatales 2022, cuando emprenda un proyecto de mejora de capital específico en una carretera estatal o en una calle local que cruce una carretera estatal financiada a través del Programa de Protección y Operación de Carreteras Estatales, para incluir nuevas instalaciones para peatones y bicicletas, o mejorar las instalaciones existentes, como parte del proyecto, de conformidad con los requisitos especificados. Para cada equipo de desarrollo de proyectos que el departamento establece para un proyecto, el proyecto de ley requeriría que el departamento incluya representantes específicos en el equipo.

(2) La ley existente requiere que los fondos en la Cuenta de Carreteras del Estado se programen, presupuestan y gasten para maximizar el uso de los fondos federales y se basen en una secuencia específica de prioridades, que incluyen, entre otras, mejoras de seguridad cuando se produzcan cambios físicos, otros que agregar carriles adicionales, reduciría las muertes y el número y la gravedad de las lesiones.

Este proyecto de ley requeriría que esas mejoras de seguridad prioricen la reducción de muertes y lesiones graves, incluidas las muertes y lesiones de peatones, ciclistas y usuarios del transporte público en el sistema de carreteras del estado.

APÉNDICE B

IDENTIFICACIÓN DE COMUNIDADES DESFAVORECIDAS (DAC)

Apéndice B
Identificación de Comunidades Desfavorecidas (DAC)

SB 1000 define los criterios para identificar un DAC: Un área identificada por la Agencia de Protección Ambiental de California (CalEPA) de conformidad con la Sección 39711 del Código de Salud y Seguridad o un área que es un área de bajos ingresos que se ve desproporcionadamente afectado por la contaminación ambiental y otros peligros que pueden provocar efectos negativos para la salud, exposición o degradación ambiental.

La Herramienta de evaluación de la salud ambiental de las comunidades de California (o CalEnviroScreen, como se le conoce más comúnmente), es una herramienta basada en la ciencia desarrollada por la Oficina de Evaluación de Peligros para la Salud Ambiental en nombre de CalEPA para ayudar a identificar las comunidades que están desproporcionadamente agobiadas por múltiples fuentes de contaminación y vulnerabilidades. Utiliza un marco de "impacto acumulativo" para "identificar las comunidades en California más afectadas por la contaminación de múltiples fuentes y más vulnerables a sus efectos, teniendo en cuenta las características socioeconómicas y el estado de salud subyacente". Fuente: SB 1000 Planificación del kit de herramientas de implementación para comunidades saludables octubre de 2017 Revisado en julio de 2018

CalEnviroScreen utiliza datos ambientales, de salud y socioeconómicos existentes para clasificar todos los distritos censales de California según 20 indicadores diferentes. Los indicadores están organizados en cuatro categorías de componentes: exposición a la contaminación, efectos ambientales, poblaciones sensibles y factores socioeconómicos. Estas categorías se resumen en dos métricas principales: carga de contaminación y características de la población, que CalEnviroScreen multiplica para llegar al puntaje CalEnviroScreen. En general, cuanto más alta es la puntuación, más afectada está una comunidad por la carga de contaminación y las vulnerabilidades de la población.

Las áreas de bajos ingresos por ingreso medio en todo el estado se determinan utilizando las estimaciones de 5 años de la Encuesta de la Comunidad Estadounidense (ACS) más reciente para las secciones del censo de California. Cualquier tramo censal en el área de planificación del Plan General con un ingreso familiar medio igual o inferior al 80 por ciento del ingreso familiar medio del estado se identificaría como un área de bajos ingresos.

CARB ha creado un mapa que identifica las comunidades de bajos ingresos en todo California según el ingreso medio estatal y los límites de ingresos estatales del HCD. Este mapa ayuda a identificar comunidades para los propósitos de AB 1550 y también puede usarse en parte para identificar DAC locales de acuerdo con SB 1000. Fuente: https://www.arb.ca.gov/cc/capandtrade/ Auctionproceeds / communityinvestments. htm.

Método de evaluación de la justicia ambiental (a nivel estatal, integral). EJSM fue desarrollado por el Programa para la Equidad Ambiental y Regional (PERE) de la Universidad del Sur de California para analizar los impactos acumulativos (CI) a nivel de tramo censal, pero también ofrece una unidad más fina de análisis espacial basada en la ubicación de tierras sensibles. usos. En comparación con CalEnviroScreen, EJSM utiliza métricas adicionales en su puntuación, incluida la raza y el origen étnico, los riesgos de vulnerabilidad climática y el análisis de la calidad del agua. En total, EJSM resume sus indicadores en cuatro categorías: 1) proximidad al peligro y uso de la tierra; 2) exposición estimada a la contaminación del aire y riesgo para la salud; 3) vulnerabilidad social y sanitaria; y 4) vulnerabilidades climáticas. Si bien EJSM calcula un puntaje de CI que va de 4 a 20, no se ha establecido un umbral para definir las comunidades afectadas de manera desproporcionada o "desfavorecidas". El conjunto de herramientas SB 1000 sugiere que cualquier área que obtenga una puntuación en el percentil 50 superior de la puntuación de CI (igual a 12 o superior) se considere áreas que experimenten impactos desproporcionados. Fuente: https://dornsife.usc.edu/assets/sites/242/docs/ EJSM_Maps_final_for_website.pdf.

La Ciudad de Guadalupe no es una comunidad desfavorecida según la SB 535, según la puntuación de EnviroScreen. Sin embargo, se considera en desventaja bajo AB 1550 debido a su estado actual como una comunidad de bajos ingresos. La Ciudad también está identificada en el Mapa de Comunidades de Bajos Ingresos de CARB.

La ciudad de Guadalupe tiene un puntaje de impacto acumulativo (puntaje estatal) de 10 en el sistema de mapeo EJSM, un puntaje de impacto acumulativo (puntaje regional) de 12 y un puntaje de impacto acumulativo con vulnerabilidad al cambio climático (puntaje regional) de 13. El EJSM El sistema de mapeo también analiza la proximidad a los peligros y los usos sensibles de la tierra, la Ciudad de Guadalupe obtuvo un puntaje de 5, utilizando una clasificación de quintiles por Tracto Censal para calificar, el peor nivel que se muestra en el mapa de puntaje regional. Los mapas de riesgo y exposición para la salud, vulnerabilidad social y sanitaria y vulnerabilidad al cambio climático para esta área también indican un puntaje de 5, nuevamente el quintil más alto por tramo censal en su sistema de mapeo. Fuente: Programa PERE USC para la equidad ambiental y regional, paquete de mapas de convocatoria de EJSM, 16/01/15.

APÉNDICE C

METAS, OBJETIVOS Y ACCIONES DE IMPLEMENTACIÓN DEL
PLAN DE MITIGACIÓN DE PELIGROS DE MÚLTIPLES JURISDICCIONES DEL
CONDADO DE SANTA BÁRBARA 2017

RESOLUTION NO. 2017-34

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GUADALUPE, CALIFORNIA ADOPTING THE 2016 UPDATE OF THE SANTA BARBARA COUNTY MULTI-JURISDICTION HAZARD MITIGATION PLAN AND THE CITY OF GUADALUPE ANNEX

WHEREAS, The Federal Disaster Mitigation Act of 2000 (Act), as described in 44 CFR Section 201.6 mandates local governments to submit and maintain a Federal Emergency Management Agency (FEMA) approved local hazard mitigation plan; and,

WHEREAS, The City of Guadalupe has participated in a county-wide multi- jurisdictional plan with Santa Barbara County as the lead agency; and,

WHEREAS, The Multi-Jurisdiction Hazard Mitigation Plan identifies each jurisdiction's risk assessment and mitigation strategies to reduce the impacts of natural disasters on the public and local government; and,

WHEREAS, Identification of hazards in the City assists with response planning, exercise development, public education, and awareness, and other emergency management functions; and,

WHEREAS, The Federal Disaster Mitigation Act of 2000 requires the Plan and updates to be formally adopted by the City Council and provided to FEMA for formal approval.

NOW THEREFORE IT IS HEREBY RESOLVED by the City Council of the City of Guadalupe, California, as follows:

1. The City Council approves and adopts the 2016 update of the Hazard Mitigation and Risk Assessment Plan in accordance with the Disaster Mitigation Act of 2000.
2. The City council adopts the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan.
3. This Resolution is effective upon its adoption.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Guadalupe held Tuesday, August 8th, 2017 motion of Councilmember **VIRGINIA PONCE**, Seconded by Councilmember **ARISTON JULIAN**, and on the following roll call vote, to wit:

AYES:	**5**	**Ramirez, Ponce, Lizalde, Rubalcaba, Julian**
NOES:	**0**	
ABSENT:	**0**	
ABSTAIN:	**0**	

CITY OF GUADALUPE

BY: _____
John Lizalde, Mayor

ATTEST:

_____
Joice Earleen Raguz, City Clerk

CONTENTS

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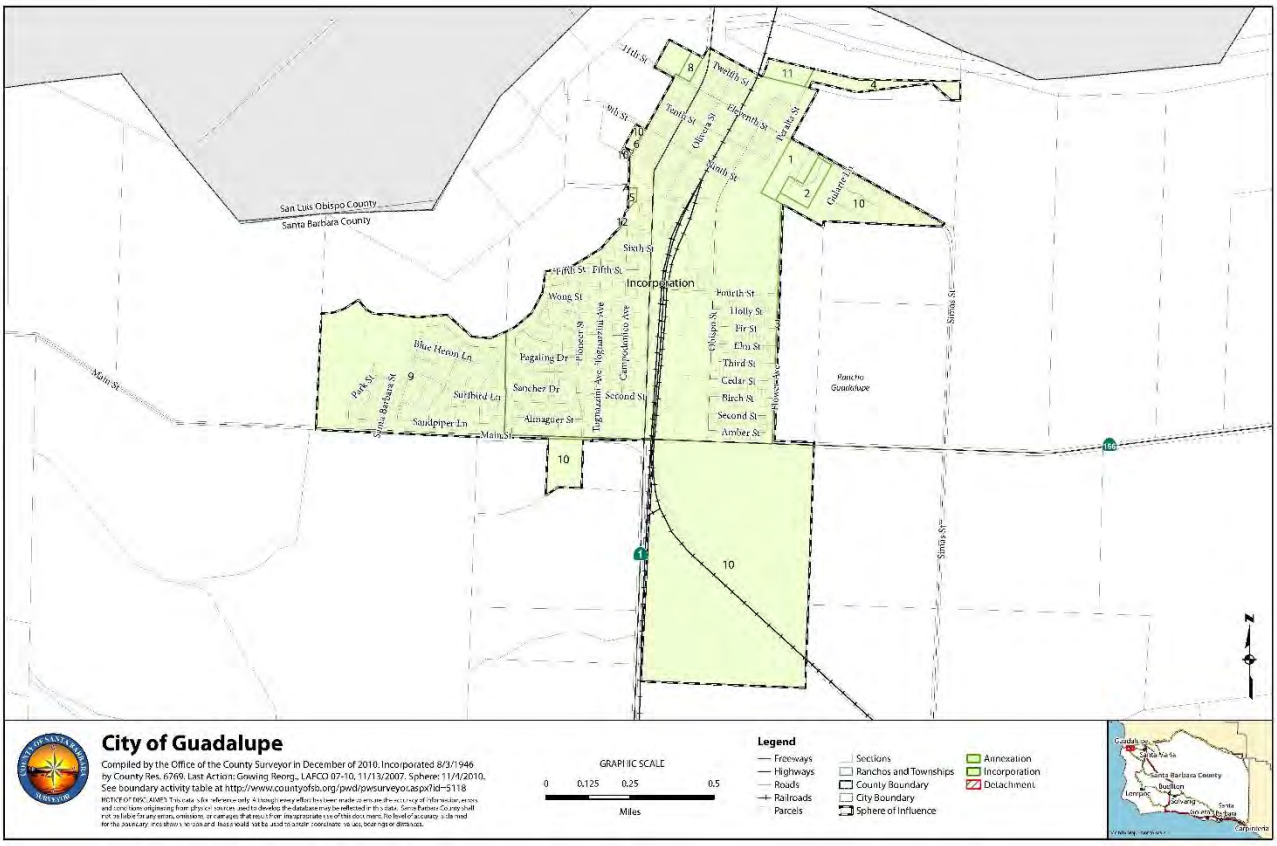
12.1 INTRODUCTION

This annex was prepared in 2016 as part of an update to the Santa Barbara County Multi-Hazard Multi-Jurisdictional Hazard Mitigation Plan. The City of Guadalupe participated in the County wide Mitigation Advisory Committee, reviewed all portions of the previous hazard mitigation plan pertaining to the City, and incorporated relevant components into this annex. This annex serves as a comprehensive hazard mitigation plan for the City of Guadalupe. It contains updated capability assessment information, a current vulnerability assessment, and an updated/revised mitigation strategy. The methodology and process for developing this annex is explained throughout the following sections.

Guadalupe is located several miles off the coast, and about 10 miles west of Santa Maria. It is 85 feet above sea level, and contains a land area of 1.31 square miles.



The 2015 population estimate is 7,318 and the median household income was $45,456 according to the 2010-2014 U.S. Census Bureau data. Guadalupe boasts one of the lowest crime rates in California. Guadalupe is home to two museums; the Guadalupe Cultural Arts &

Educational Center and the Guadalupe Historical Society. Several events are held each year in downtown Guadalupe, including various festivals and parades. Guadalupe Beach is a popular place for fishing, and the Dunes Center provides hiking with a variety of natural wonders. Agriculture is the primary economic driver in Guadalupe.

Development and population trends remained stagnant during the past three years as we navigated out of a national recession. There were several pending development projects that had been postponed until the financial climate improved which have now either begun or back on the permitting path. The primary development is the Pasadera project with 800 homes and a commercial district. This project has now seen the infrastructure complete and about 20 homes under construction.

In addition to the large housing development, there is a low income apartment project, two 30 unit apartment projects and a greatly expanded agricultural cooling facility. While the Pasadera housing project will likely not be completed during the upcoming five year planning period, the remaining identified projects should be completed.

RESOLUTION NO. 2017-XX
A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GUADALUPE, CALIFORNIA
ADOPTING THE 2016 UPDATE OF THE SANTA BARBARA COUNTY MULTI-JURISDICTION HAZARD MITIGATION PLAN AND THE CITY OF GUADALUPE ANNEX

WHEREAS, The Federal Disaster Mitigation Act of 2000 (Act), as described in 44 CFR Section 201.6 mandates local governments to submit and maintain a Federal Emergency Management Agency (FEMA) approved local hazard mitigation plan; and,

WHEREAS, The City of Guadalupe has participated in a county-wide multi-jurisdictional plan with Santa Barbara County as the lead agency; and,

WHEREAS, The Multi-Jurisdiction Hazard Mitigation Plan identifies each jurisdiction's risk assessment and mitigation strategies to reduce the impacts of natural disasters on the public and local government; and,

WHEREAS, Identification of hazards in the City assists with response planning, exercise development, public education, and awareness, and other emergency management functions; and,

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1. The City Council approves and adopts the 2016 update of the Hazard Mitigation and Risk Assessment Plan in accordance with the Disaster Mitigation Act of 2000.
2. The City council adopts the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan.
3. This Resolution is effective upon its adoption.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Guadalupe held Tuesday, _____ on motion of Councilmember _____, Seconded by Councilmember_____, and on the following roll call vote, to wit:

Ayes:
Noes:
Absent:
Abstain:

CITY OF GUADALUPE

BY: _____
John Lizalde, Mayor

ATTEST:

_____
Joice Earleen Raguz, City Clerk

12.2 PLANNING PROCESS

12.2.1 Overview

The planning process implemented for updating the City of Guadalupe Multi-jurisdictional Hazard Mitigation Plan (HMP) utilized two (2) different planning groups. The first group is the Mitigation Advisory Committee (MAC) and the second is the Local Planning Team. All eight (8) incorporated cities (City of Buellton, City of Carpinteria, City of Goleta, City of Guadalupe, City of Lompoc, City of Santa Barbara, City of Santa Maria, and City of Solvang) joined the County of Santa Barbara in the preparation of this Multi-Jurisdictional Hazard Mitigation Plan. Each of the participating jurisdictions had representation on the MAC and was responsible for the administration of their own Local Planning Team.

The MAC team was guided through the planning process; and as material was shared and decisions were made, it was the MAC team's responsibility to bring these findings back to their Local Planning Team. Below is a summary of the collaborative planning process of the MAC and Local Planning team.

Throughout this process, and though other standard practices, opportunities for public involvement was offered and encouraged. More details about public engagement is provided under Section 12.2.4 (Public Outreach).

12.2.2 Mitigation Advisory Committee (MAC)

Planning Process

The MAC planning process followed the concepts and principles outlined in the Comprehensive Preparedness Guide (CPG) 101. Both the MAC and the Local Planning teams focused on these underlining philosophies:

- *Focus on the mitigation strategy*

  The mitigation strategy is the plan's primary purpose. All other sections contribute to and inform the mitigation strategy and specific hazard mitigation actions.

- *Process is as important as the plan itself*

  In mitigation planning, as with most other planning efforts, the plan is only as good as the process and people involved in its development. The plan should also serve as the written

record, or documentation, of the planning process.

- *This is the community's plan*

  To have value; the plan must represent the current needs and values of the community and be useful for local officials and stakeholders. Develop the mitigation plan in a way that best serves your community's purpose and people.

- *Intent is as important as Compliance*

  Plan reviews will focus on whether the mitigation plan meets the intent of the law and regulation; and ultimately that the plan will make the community safer from hazards.

The MAC planning process incorporated the following steps:

- *Plan Preparation*
  - Form/Validate planning team members
  - Establishing common project goals
  - Setting expectations and timelines
- *Plan Development*
  - Validate and revise the existing conditions/situation within planning area; the *Capabilities Assessment and Hazard Assessment Sections* in the HMP
  - Develop and review the risk to hazards (exposure and vulnerability) within the planning area; the *Vulnerability Assessment Section* in the HMP
  - Review and identify mitigation actions and projects within the planning area; the Mitigation Strategy in the HMP
- *Finalize the Plan*
  - Review and revise the plan
  - Approve the plan
  - Adopt and disseminate the plan

Members

The Mitigation Advisory Committee (MAC) is a standing committee that works together throughout the year to discuss and provide input on a variety of activities. The MAC is led by Santa Barbara County Office of Emergency Management and has representation from all of the local jurisdictions, as well as County Departments and Cal OES. Table 12.1 is a list of the MAC members.

The MAC was utilized for the updating of the Santa Barbara County Multijurisdictional Hazard Mitigation Plan. To assist with this effort Santa Barbara County Office of Emergency Management hired a consultant to support and assist each jurisdiction with their Local Hazard Mitigation Plan; contained as an annex in the Santa Barbara County Multijurisdictional Hazard Mitigation Plan.

Table 12.1 Members of the Mitigation Advisory Committee 2016

Names	Organization	MAC Member Status
Michael Dyer	Santa Barbara County – Emergency Manager	New Member
Shannon McCrone	Santa Barbara County – Emergency Services Planner	New Member
Robert Troy	Santa Barbara County – Deputy Director Emergency Management	New Member
Tylor Headrick	Santa Barbara County- GIS/Emergency Services Planner	New Member
Rob Hazard	Santa Barbara County Fire – Battalion Chief	New Member
Rudy Martel	Santa Barbara County Agricultural Commissioner	New Member
Joyce Tromp	Santa Barbara County Flood Control	New Member
Jon Frye	Santa Barbara County Flood Control	New Member
Jan Koegle	Santa Barbara County Health	Returning Member
Marc Bierdzinski	City of Buellton – City Manager/Planning Director	Returning Member
Mimi Audelo	City of Carpinteria – Program Manager	New Member
Claudia Dato	City of Goleta – Senior Project Manager (Public Safety)	Returning Member
Gary Hoving	City of Guadalupe – Public Safety Director	New Member
Kurt Latipow	City of Lompoc – Fire Chief	New Member
Yolanda McGlinchey	City of Santa Barbara – Emergency Services Manager	Returning Member
Roy Dugger	City of Santa Maria – Emergency Preparedness Coordinator	Returning Member
Lisa Martin	City of Solvang	New Member
Yvette LaDuke	Cal OES – Emergency Services Coordinator	New Member
Andrew Petrow	Consultant	New Member

Overview of Meetings

The MAC meetings were arranged and scheduled to follow the planning process steps outlined above. Each meeting was designed to walk the MAC members through sections of the Santa Barbara County Multijurisdictional Hazard Mitigation Plan and annexes. In addition to reviewing and validating material, the intent was to also educate MAC members on the planning process and purpose of each section. By taking this step it helped ensure that each MAC member could bring this knowledge back to their Local Planning Teams. The table below (Table 12.2) provides a list and the main purpose of each of the MAC meetings.

Table 12.2 Mitigation Advisory Committee (MAC) Meetings Summary

Date	Purpose
April 2015	**Kick Off (in person)** • Reviewed and discussed the hazards in the Plan; including initial ranking. • Each jurisdiction was asked to review their previous goals and objectives with a local planning team.
December 2015	**MAC Meeting (in person)** • Recap of previous MAC meeting • Goal of the project • Understanding of HMP update requirements • Validation of team members • Proposed Planning Process • Review of Capabilities Assessment Section
January 2016	**MAC Meeting (conference call)** • Recap of previous MAC meeting • Review of Capabilities Assessment Section • Discussion of public outreach efforts • Preparation for next MAC meeting
February 2016	**MAC Meeting (in person)** • Recap of previous MAC meeting • Review of Hazard Assessment Section • Presentation of Vulnerability Assessment results • Discussion of public outreach efforts • Preparation for next MAC meeting
March 2016	**MAC Meeting (conference call)** • Recap of previous MAC meeting • Review of Capabilities Assessment and Vulnerability Assessment Sections • Preparation for next MAC meeting
April 2016	**MAC Meeting (in person)** • Recap of previous MAC meeting • Initial discussion of mitigation projects and actions
May 2016	**MAC Meeting (conference call)** • Recap of previous MAC meeting • Discussion of mitigation actions and projects • Discussion of update process • Preparation for next MAC meeting
June 2016	**MAC Meeting (in person)** • Recap of previous MAC meeting • Discussion of mitigation actions and projects • Discussion of update process

12.2.3 Local Planning Team

Planning Process

A Local Planning Team was created to review and arrive at a consensus relating to the implementation of the Guadalupe Annex of the Hazard Mitigation Plan. The team was created from key management and supervisory staff some of which are City employees while others are contracted service providers as outlined in a chart below.

The Hazard Assessment presents the methodology in which the Local Planning Team reviewed the previously identified hazards and discussed revisions to their prioritization. A profile for each hazard is included which summarizes the type of hazard, location and extent, history of past occurrences, and probability of future occurrences. The hazard identification and ranking documented in this section form the foundation for prioritizing mitigation actions. The Local Planning Team reviewed the previous Mitigation Strategy and reported on progress made in implementing the listed actions. In addition, based on updates to the hazard identification, profiles, vulnerability assessments, and the capability assessment new mitigation actions were identified. The progress report and new mitigation actions are presented in the updated Mitigation Strategy.

The Local Planning Team held electronic meetings as necessary during the review and update to the plan. The Local Planning Team coordinated and consulted with other entities and stakeholders to identify and delineate natural hazards within the city to assess the risks and vulnerable property in identified hazard areas. From the start, every attempt was made to establish an open public process to provide an opportunity for all sectors of the overall community to be involved in the planning process. Most of the public input was sought through social media outlets, in person survey and social media notices regarding locations to review the plan. Our social media followers have grown substantially over the past two years creating a successful platform for sharing information.

Members

Table 12-3 lists the City of Guadalupe Local Planning Team members. These individuals collaborated to identify the City's critical facilities, provide relevant plans, report on progress

of city mitigation actions and provide suggestions for new mitigation actions.

Table 12-3 City of Guadalupe Local Planning Team 2016

Name	Title	Responsibility
Cruz Ramos	City Administrator	City Administration
Gary L. Hoving	Director of Public Safety	Fire and Disaster Planning
Gary L. Hoving	Police Chief	Law Enforcement
Mike Pena	Public Works Supervisor	Public Works Operations
Jerry Hittleman	Contract City Planner	Planning/Zoning
Jeff Van den Eikhof	Contract Engineer	Public Works/Engineering
John McMillan	Contract Building Official	Building
Dave Fleishman	Contract City Attorney	Legal

Overview of LPT Meetings

The Local Planning Team held meetings as necessary during the review and update to the plan. The Local Planning Team coordinated and consulted with other entities and stakeholders to identify and delineate natural hazards within the city to assess the risks and vulnerable property in identified hazard areas.

A finalized draft was of the Hazard Mitigation Plan was distributed to the LPT for final review and comment. Reviews were completed and incorporated into this document on December 6, 2016, resulting in the final plan for submission to the County of Santa Barbara.

Table 12.4 City of Guadalupe Internal Collaboration Meetings Summary

Meeting Dates	Summary of Discussions
November 2016	Guadalupe coordinated internally via e-mail. Draft changes were shared via e-mail and responses were received via e-mail.
December 2016	LPT review and comments incorporated into the plan prior to submission to the County of Santa Barbara and then to be forwarded to the State of California.

12.2.4 Public Outreach

Informing the Community of the HMP Update process

In November, 2016, the City of Guadalupe issued a press release announcing the commencement of the hazard mitigation planning process. This announcement invited the public to notify the City of their interest to participate in the planning process or submit comments.

The final draft was completed and made available for public review at the City Hall and at the Police Station. Access for review of the document was also announced through social media (FaceBook for Police and Fire Departments). Using Facebook to announce the opportunity to review the plan reached 689 people.

One person came to the Police Station to review the draft document in response to the media release. Some of the information provided was included in the document relating to the history of previous hazardous events.

Ongoing Public Outreach

The City of Guadalupe utilizes several platforms to educate the public about hazards in the community, relevant programs to safeguard and protect themselves from disaster, and actions they can take to prepare themselves for events. Below is a list of the different platforms used and a summary of the some of the programs:

- Social Media (Facebook)
- Meetings/Workshops
- Public Surveys
- Defensible Space Education
- Drought Education

As part of the City of Guadalupe on-going Hazard Mitigation Plan process, the City also issued a public survey to seek input from the community about would prioritize hazards facing the city and what government officials could do to better communicate the risk. Hard copies of the surveys were also made available on public counters within the City Police Department.

Survey Results

On September 15, 2016, a survey was distributed via social media and in-person to solicit public input regarding the concern for risk to natural hazard events and suggestions for how local government could minimize the risk. The City of Guadalupe posted a questionnaire for those who reside or work in the community offering the opportunity to participate in the survey.

Results of the survey were posted on social media allowing sufficient time for review and provide additional comment before the plan was approved by the City Council. In addition, public comments were permitted during the Council Meeting prior to adoption of the draft plan.

The City of Guadalupe received 30 completed surveys. The survey requested the respondents to identify if they lived or worked in Guadalupe, select an age range and identify the gender. No individual identifying information was requested in an effort to seek candid responses. Age and gender responses will be used to assist in marketing and selection of training programs in the future.

The survey format allowed the City an opportunity to expand the list of stakeholders. The information provided an opportunity to hear from the community on concerns and needs broader than the existing focus hazards identified in this document.
The City of Guadalupe will consider the recommendations provided by survey respondents regarding how the local government and the County can help residents prepare for an event, throughout the life of this plan and prioritize those that can be implemented efficiently and effectively.

The survey responses received from the City of Guadalupe residents are summarized below:

1. Thirty (30) survey respondents were from the City of Guadalupe. Some worked in the City and others live in the city. There were a high number of respondents who both worked and live in the community explaining a total number of responses higher than the number of received surveys.

2. Respondents by gender, age and affiliation:

Gender	18-30	31-50	51-70	71+	Total
Male	3	6	3	1	13
Female	1	10	4	2	17

Local residents and workplace:

Age	18-30	31-50	51-70	71+	Totals
Live in Guadalupe	1	11	3	3	18
Work in Guadalupe	3	15	8	2	28

3. Respondents were asked to identify all hazards of concern moving beyond the primary hazards the MAC identified. The below chart identifies the areas of concern concluding that the greatest number of topic responses would be of most concern. Below are responses to the Guadalupe Hazard Mitigation Community Survey:

Hazard Concerns	**Responses**
Agriculture	12
Climate Change	12
Crime	15
Dam Failure	8
Drought	20
Earthquake	22
Flooding	7
Freezes	3
Hazardous Materials	14
Landslide	13
Levee Failure	11
Natural Gas Leak	13
Train Accidents	18
Tsunami	10
Wildfire	8
Windstorms	4

Hazards ranked by importance:

Hazard Concerns	**Priority**
Earthquake	1
Drought	2
Train Accidents	3
Crime	4
Hazardous Materials	5
Natural Gas Leak	6
Landslide	7
Agriculture	8

Climate Change	9
Levee Failure	10
Tsunami	11
Wildfire	12
Dam Failure	13
Flooding	14
Windstorms	15
Freezes	16

4. Respondents were asked if they had a family emergency plan and if it included a provision for pets. Below is a summary of responses:

Family Emergency Plan	
Yes	13
No	17
Plan for pets	
Yes	10
No	19

5. Respondents were asked if they had attended a Community Emergency Response Team (CERT) or Listos training. This information proved to be extremely useful in evaluating the need for such training as well as the interest to participate. Following up with the training component, responders were asked about First Aid/CPR training and interest to participate if offered. Below is a summary of responses from Guadalupe respondents:

CERT/Listos Training	
Yes	9
No	21
Would attend CERT if offered	
Yes	24
No	5

Attended First Aid/CPR	
Yes	25
No	5
Would attend first aid/CPR	
Yes	28
No	2

6. Respondents were asked if they had any special needs or handicapped persons residing in their home. The following response was received:

Handicapped Persons In Home	

Yes	3
No	27

7. Respondents were asked to select each of the types of local services they would like available to assist them in disaster preparedness. Virtually all of the four selections were checked by each respondent leading to a strong need to improve government/community information sharing. Below is a summary of responses:

Local Government Assistance	Totals
Effective Notifications and Communications	28
Provide Training and Education	27
Awareness Vulnerable Population	23
Use Volunteers During Emergencies	26

8. Respondents were asked to identify the emergency supplies they maintain as a preparation for an emergency. All responded affirmatively to most of the items on the list. The weakest response is in the availability of cash and in a back-up cell phone battery or charging system. Below are the responses:

Emergency Supplies on Hand	
Water	24
Can Opener	29
Eating Utensils	29
Canned non-perishable foods	28
Outdoor Grill/Stove	27
Sufficient Medications	18
First Aid Kit	24
Portable Radio	18
Protection of Documents	17
Extra Clothing	24
Blankets/Sleeping Bags	28
Sufficient Cash	14
Flashlights and Batteries	25
Half Tank of Gasoline	18
Backup Cell Phone Battery	10
Pet supplies	15

12.3 CAPABILITIES ASSESSMENT

The LPT identified current capabilities available for implementing hazard mitigation activities. The Capability Assessment portion of the jurisdictional mitigation plan identifies administrative, technical, legal and fiscal capabilities. This includes a summary of departments and their responsibilities associated to hazard mitigation planning as well as codes, ordinances, and plans

already in place associated to hazard mitigation planning. Additionally, the Assessment provides Guadalupe's fiscal capabilities that may be applicable to providing financial resources to implement identified mitigation action items

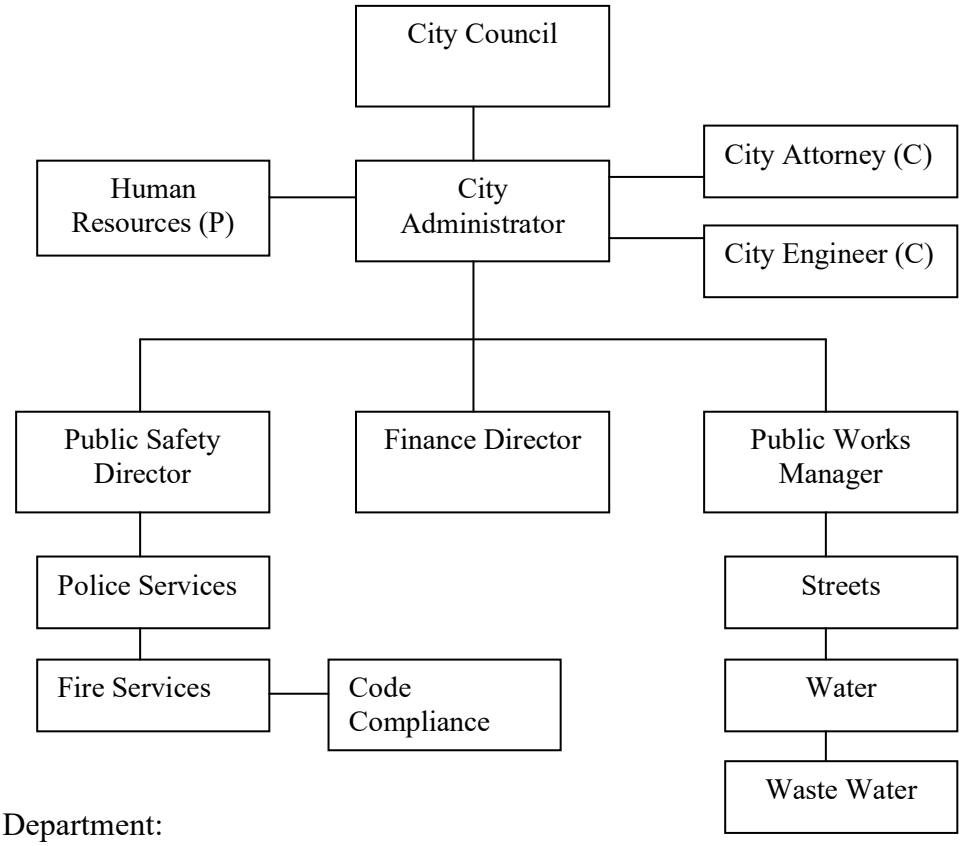
12.3.1 Existing Governance structure and departments

The Mayor and City Council are elected by the voters of the City of Guadalupe. The City Council exercises the legislative powers of the City and other city officials oversee the daily operations. The Council appoints the City Administrator. City administration includes the officials appointed by the City Council and officials elected by the citywide vote, including the City Clerk, Treasurer, Director of Public Safety (Police and Fire Chief,) Public Works supervisor, Finance Director, Human Services Director, Parks and Recreation Director, Contracted City Planner, Contracted City Engineer and Contracted City Attorney. Guadalupe has a Mayor and four Council members.

After FEMA approval and City Council adoption, the 2011 LHMP was also utilized and referenced during the City's annual planning process to update the 2013 City Emergency Operations Plan, the City General Plan and the recent 2016 THIRA.

The LPT is integrated into the development review process within the City of Guadalupe. As a small entity, the same core group of designated staff members have multiple responsibilities with a focus on their respective disciplines. It is within the scope of responsibility of the LPT to incorporate the Multi-Hazard Mitigation plan into all of the various plans within the City. It is the intent of the LPT to meet annually to review the Hazard Mitigation Plan detail for continued application to the various projects and programs.

The City of Guadalupe's organizational chart is provided below. Department heads under contract are noted as (C); part-time positions are notes as (P).



- Fire Department:
  - Administration: Develop, implement and monitor policies, procedures, budgets, fees, automatic aid agreements, mutual aid agreements, and liaison with other City departments and outside agencies.
  - Fire and Life Safety Program: Manage Building and Planning Departments, coordinate adoption of codes and ordinances, review site and building plans for fire code compliance, develop and present public education programs and manage the City's General Code Compliance program.
  - Operations and Emergency Medical Services: Maintain the department's personnel, apparatus, equipment and fire stations in a state of readiness to respond to the

community's needs, develop and implement standard operating procedures for various types of emergency responses, respond to all types of emergencies, and train and interact with neighboring jurisdictions and regional agencies. Manage the department's EMT program, respond to medical emergencies and other calls for service, and participate with other community and regional health care providers to reduce public illness and injury.

- Emergency Planning and Management: Coordinate the City's Disaster Preparedness Program, liaison with all City departments and divisions, as well as other public and private organizations. Develop, coordinate and implement hazard-specific response plans, and maintain the operational readiness of the City's Emergency Management Team, the Emergency Operations Center (EOC) and other key elements.

- Building and Planning Department (Contract Services):
  - Coordinate adoption and amending of building, plumbing, electrical, and mechanical codes. Develop building ordinances.
  - Review site and building plans for compliance with building codes and ordinances.
  - Damage assessment of structures from multiple causes to facilitate repair and future occupancy
  - Develop and maintain City general plan, zoning ordinances and development standards.
  - Oversight of City development process assuring compliance with zoning and general plan, and including environmental impact reports, design review, historic preservation, landscape review, habitat conservation, floodway prohibitions and floodplain development standards.
- Public Works Department:
  - Maintains City infrastructure (assets) ranging from streets to parks to buildings, and infrastructure
  - Responds to City emergencies, including EOC response in disasters and assisting police and fire departments with traffic and perimeter control efforts, traffic collision clean up and evacuation routing.
  - Operates, maintains and enhances both the water distribution and sewer collection systems within the City of Guadalupe. Also has oversight of solid waste management

program. Solid waste collection is done through a private contractor.

- Responsible for planning and implementation associated with the following City plans:
  - Water Quality Emergency Notification Plan
  - Water Division Emergency Response Plan
  - Sewer Overflow Response & Prevention Plan
  - Wastewater Treatment Plant (WWTP) Operations Plan

- Engineering Department (Contract Service):
  - Reviews engineering on private and public grading, floodways, retention basins, transportation infrastructure and structures to assure compliance with Federal, State and local laws, regulations and ordinances on seismic and structural stability.
  - Develops engineering ordinances and policies that help protect and preserve City infrastructure
  - Evaluates all circulation elements for projected traffic impacts
  - Determines needed infrastructure improvements, drainage systems, water system and water/sewer treatment capabilities
  - Provides response personnel for evaluation of damaged infrastructure and rescue situation.
  - Provides technical assistance as needed in the City's EOC
  - Coordinates other response agencies assisting with damage assessment
- Police Department:
  - Responds to safety concerns involving threats and/or damage to life or property. Acts as the enforcement entity for violations of State and local laws and ordinances
  - Primary emergency responders to acts of civil disobedience and public disorders and terrorism
  - Security and support personnel during emergency rescue and management
  - Investigative services for crimes that occur within the city
  - Participates in the development of emergency response plans and implements the emergency response plans and policies, focusing on evacuation procedures and traffic control

12.3.2 Administrative and Technical Capacity

The administrative and technical capabilities of Guadalupe, as shown in Table 12-3, provides an identification of the staff, personnel, and department resources available to implement the actions identified in the mitigation section of the Plan. Specific resources reviewed include those involving technical personnel such as planners/engineers with knowledge of land development and land management practices, engineers trained in construction practices related to building and infrastructure, planners and engineers with an understanding of natural or manmade hazards and floodplain managers. Guadalupe's department heads multitask in many areas because of budgetary constraints.

Table 12-3 City of Guadalupe: Administrative and Technical Capacity

Staff/Personnel Resources	Y/N	Department/Agency and Position
1. Planner(s) ensures compliance with planning, zoning regulations and CEQA and NEPA	Y	Planning – Contract Planning Firm
2. Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Engineering – Contract City Engineer
3. Planners or Engineer(s) with an understanding of natural and/or manmade hazards	Y	Planning & Engineering – Contract Planning Director & City Engineer
4. Floodplain manager	Y	Engineering – Contract City Engineer
5. Surveyors	N	Engineering – Contract City Engineer
6. Staff with education or expertise to assess the community's vulnerability to hazards	Y	Fire and Police through the Director of Public Safety
7. Personnel skilled in GIS and/or HAZUS	N	Contract out to Consultant
8. Scientists familiar with the hazards of the community	Y	Contract out to Consultants
9. Emergency Manager	Y	Director of Public Safety
10. Grant writers	Y	Police Department and Contract Planning and Engineering Firms

12.3.3 Legal and Regulatory Capabilities

The legal and regulatory capabilities of Guadalupe are shown in Table 12-4, which presents the existing ordinances and codes that affect the physical or built environment of Guadalupe. Examples of legal and/or regulatory capabilities can include: the City's building codes, zoning ordinances, subdivision ordnances, special purpose ordinances, growth management ordinances, site plan review, general plans, capital improvement plans, economic development plans, emergency response plans,

real estate disclosure plans and state and federal laws.

It is important to note that during the LHMP update planning process all of the City's plans, programs, codes, and policies were evaluated to determine their effectiveness in risk education and reduction efforts, as well as, its usefulness to implement mitigation measures. Any shortfalls or areas where the plans, programs, codes, and policies could be improved or expanded were identified and captured under annual review, the annual planning process and Mitigation Actions chapter of this plan. If no mitigation actions were identified, then it can be assumed that the planning team determined that no shortfalls or areas for improvement are needed.

Table 12-4 City of Guadalupe: Legal and Regulatory Capability

Regulatory Tools (ordinances, codes, plans)	Local Authority (Y/N)	Does State Prohibit (Y/N)
Building code	Y[1]	N
Zoning ordinance	Y	N
Subdivision ordinance or regulations	Y	N
Special purpose ordinances (floodplain management, storm water management, hillside or steep slope ordinances, wildfire ordinances, hazard setback requirements)	N	N
Growth management ordinances (also called "smart growth" or anti-sprawl programs)	Y	N
Site plan review requirements	Y	N
General or comprehensive plan	Y	N
A capital improvements plan	Y[2]	N
An economic development plan	Y[3]	N
An emergency response plan	Y	N
A post-disaster recovery plan	N	N
A post-disaster recovery ordinance	N	N
Real estate disclosure requirements	Y	N

(e.g. county or regional political entity), [1] CA Building & Fire Code, [2] Storm Drains, [3]General Plan

12.3.4 GIS, Computer and Communication Technology

The City Fire Department is trained in fire, rescue, EMS and hazardous material. Guadalupe is

fully functional on the internet and is in the process of website development. The City has a basic website which is operational.

The City has a dedicated television channel available for community service information (non-commercial) through its contract with Charter Cable TV. This channel is available for both pre-recorded and live information broadcasts.

12.3.5 Financial Resources

In the past 4 years, the National, State, and Local economy has been very slow. As a result, the City has seen a significant decrease in revenues and have experienced a reduction in services and staff.

The General Fund balance is an important element that can show the City's financial strengths or weaknesses. For Fiscal Year 2016-2017 (FY 16-17), the City of Guadalupe's operating budget has been set at $3,920.000. The revenue budget for the City contains more than 50 line items representing different sources, each governed by a distinct set of conditions particular to that revenue source. The largest revenue factor and the core of the resource base that enables the City's provision of community services is the local revenue portion of Guadalupe's General Fund. The City's revenue base is determined by different community conditions such as the current population, employment and income, economic activity within the City, and the growth of invested value from residential and commercial construction, business investment in plant and equipment, and demand for local real property. National, State, and regional economic conditions can also affect the City's revenue base by creating demand for community goods and services produced within Guadalupe. The largest expenditure categories are for operations and maintenance.

Over the last few years, California's budget has diminished rapidly due to decreased tax revenues from an economic recession. The overall health of California's economy has a significant influence on local cities and counties, as local government appropriations are usually the first to have their appropriations diminished due to downturns in the economy.

The city's major economic drivers for its revenue base are from sales tax, population growth, employment, construction, property values, and commercial activities.

Table 12-5 shows specific financial and budgetary tools available to Guadalupe such as community development block grants; capital improvements project funding; authority to levy taxes for specific purposes; fees for water and sewer services; impact fees for developers for new development; ability to incur debt through general obligations bonds; Guadalupe Redevelopment Agency and withholding spending in hazard-prone areas.

Table 12-5 City of Guadalupe: Fiscal Capability

Financial Resources	Accessible or Eligible to Use (Yes/No)
1. Community Development Block Grants (CDBG)	Y
2. Capital improvements project funding	Y
3. Authority to levy taxes for specific purposes	Y – Vote required
4. Fees for water and sewer service	Y
5. Impact fees for developers for new developments/homes	Y
6. Incur debt through general obligation bonds	Y
7. Incur debt through special tax and revenue bonds	Y – Vote required
8. Incur debt through private activity bonds	N
9. Withhold spending in hazard-prone areas	N
10. Other – SBCAG Grant	N
11. Other – Other Grants	N
12. Guadalupe Redevelopment Agency (Deferred, no interest loans; matching loans; matching grants)	Y
13. Zoning incentives, fee waivers, design rebates	Y
14. Recreation, Trails to Beach, Historic preservation, Duneship, Brownfield grants, CREF	Y

12.3.6 Relevant Plans, Policies, Programs, and Ordinances

The City of Guadalupe has a range of guidance documents and plans for each of its departments.

These include a General Plan, with the 2015 draft Housing Element which had been approved in May of 2016. The City uses building codes, zoning ordinances, subdivision ordinances, and various planning strategies to address how and where development occurs. One of the essential ways the City guides its future is through policies laid out in the General Plan.

Within the Guadalupe Municipal Code Title 15, the city codifies and adopts the California Building Fire Code and Building Code. The latest versions of the state-wide codes are titled 2016 and will become effective in January, 2017. Within these regulations are mandates to clear vegetation, post unreinforced masonry buildings, fire preventions requirements and many health and safety related requirements.

To remain consistency within the state, Guadalupe has adopted the following codes for enforcement within the City:

1) 2016 California Fire Code
2) 2016 California Building Code, Volume One and Two
3) 2016 California Administrative Code
4) 2016 California Electric Code
5) 2015 National Electric Code (NIC)
6) 2016 California Plumbing Code
7) 2016 California Mechanical Code
8) 2016 California Energy Code
9) 2016 California Green Building Standards Code
10) 2016 California Referenced Standards Code

In addition, the Guadalupe City Council enacted a Municipal Code section to authorize placard (or tagging) buildings during emergency situations deeming structures unsafe pending a formal review and inspection. This proactive section allows our fire and building personnel to assess damage and make a temporary assessment after earthquake or other disasters to swiftly protect the community and conclude the magnitude of damage during a calamity while awaiting other supportive resources to evaluate structural safety.

Another future program to aid in the management and response to a disaster will be the

implementation of a CERT team. This objective was previously identified but not completed in the previous plan. However, we have now established a Neighborhood Watch program that would like to receive the CERT training and a nearby public agency has offered their instructor.

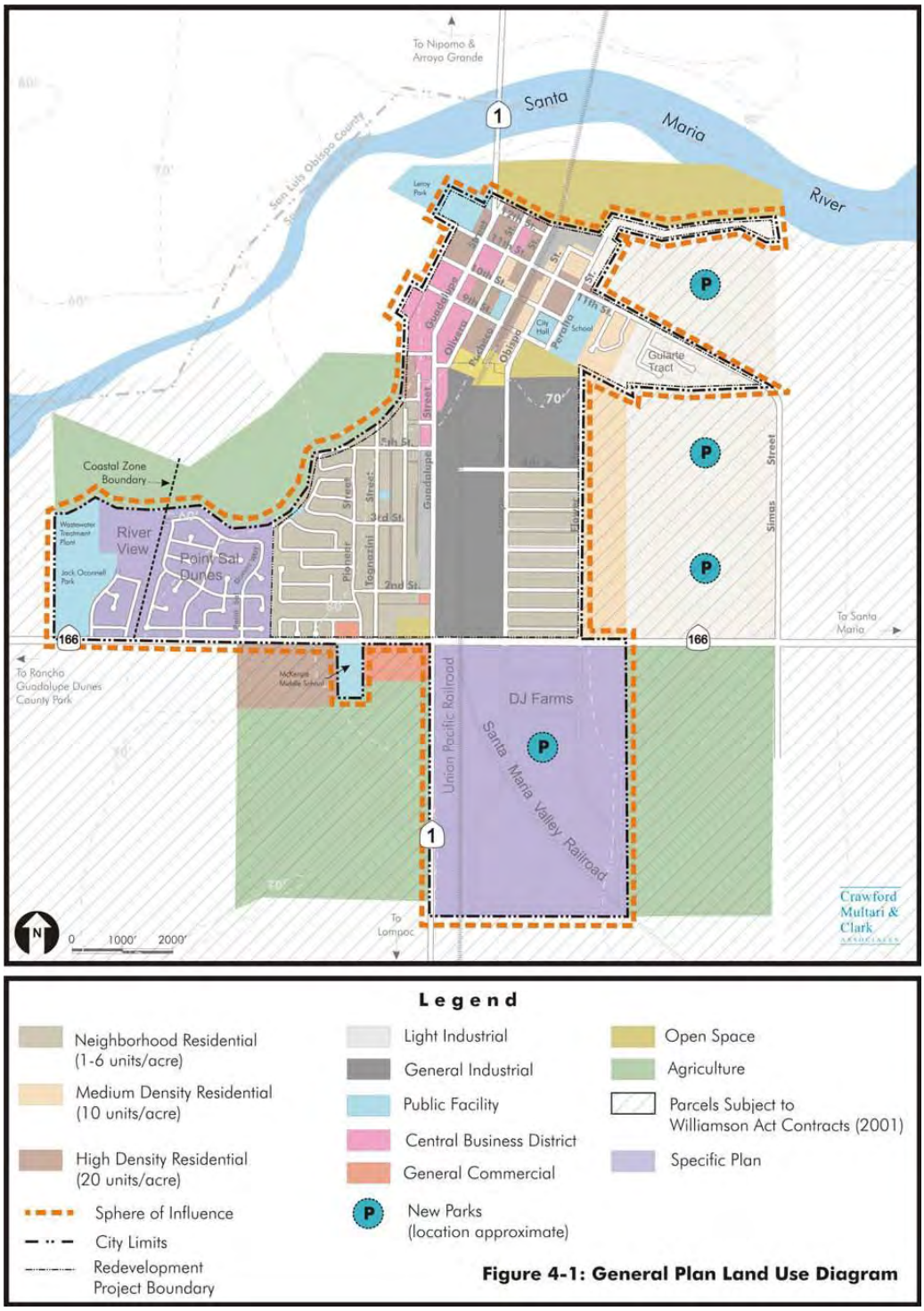
In addition, the Paid-Call Firefighting staff has been augmented with additional Reserve Firefights since 2015. These training individuals do not staff routinely assigned shifts but are available during emergencies and disaster preparation or response.

City Of Guadalupe General Plan

Land Use Element

The City of Guadalupe General Plan Use Element designates land uses to reflect the ongoing development and character of the City in terms of traffic patterns, potential hazardous areas (i.e. floodplains,) sensitive habitat, and other factors. Industrial uses support the local employment, and are planned with appropriate buffer zones to create a pleasant. Commercial zones are divided into two types, with the central business district that encourages pedestrian circulation and a general commercial district that allows for more vehicles and is geared toward services for tourists. Residential areas are designed and planned to comply with housing densities in the City's General Plan and Zoning Ordinance. When defining the residential zoning, the City of Guadalupe finds a delicate balance between urban areas and open spaces. The Agricultural Land Use designation is involved primarily with active agricultural uses while the Open Space Land Use designation is a combination of grazing activities, sensitive environmental habitats, and passive recreational areas.

Public Facilities/Parks Land Use category is concerned with water, sewage, drainage, school, parks and fire protection services in order to provide for continued development and expansion of the City of Guadalupe. The quality and adequacy of public facilities are two of the most important factors of an expanding economy and growth of a community. The Point Sal Dunes Specific Plan approved 253 residential units and reserves open space along the Santa Maria River. The City approved an 800 home residential development known as Pasadera (also referred to as DJ Farms Specific Plan) with associated commercial support. There are about 20 homes currently under construction in this development.



Legend

- Neighborhood Residential (1-6 units/acre)
- Medium Density Residential (10 units/acre)
- High Density Residential (20 units/acre)
- Sphere of Influence
- City Limits
- Redevelopment Project Boundary
- Light Industrial
- General Industrial
- Public Facility
- Central Business District
- General Commercial
- New Parks (location approximate)
- Open Space
- Agriculture
- Parcels Subject to Williamson Act Contracts (2001)
- Specific Plan

Figure 4-1: General Plan Land Use Diagram

Housing Element

The 2015 (Draft) Housing Element Update provides a comprehensive analysis of Guadalupe's demographic, economic, and housing characteristics as required by State Law. The housing component of the general plan requires local governments to balance the need for growth,

including the need for additional housing, against other competing local interests. Guadalupe experienced a 39 percent increase in the total number of housing units from 1980 to 2003 (US Census Bureau, 1980, 1990, 2000), yet from 1990 to 2000 Guadalupe's housing stock increased a mere five percent. Guadalupe is committed to affordable homes for residents with an emphasis on increased energy efficiency in new and existing homes. Cal Poly recently conducted a survey of the housing stock in Guadalupe. It was found that the majority of housing stock is in sound condition. Houses in Guadalupe seem to be improving in quality over the past years, possibility due to rehabilitation grant programs funded by the Guadalupe Redevelopment Agency and also from housing recently constructed. This Agency also provided financing for infrastructure and housing improvements until it was dissolved by state law.

Residential development in the City is constrained by environmental factors including: City boundaries and limits, protected agriculture, coastal zone proximity, flood zones, and seismic faults. About 60 acres in Guadalupe lies within the coastal zone. The City annexed this land in 1990 and prepared a local coastal plan (LCP) that was certified by the California Coastal Commission. The uses for the site include a community park, single family residences, open space and the City's wastewater treatment plan. The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621, et seq.) restricts development on the surface traces of known active faults mapped by the State Geologist. However, the San Simeon Earthquake in 2003 did affect many buildings in Guadalupe, primarily due to the fact that they are Unreinforced Masonry buildings (URM). The City of Guadalupe has land within 100-year and 500-year flood zones, but none of these lands are currently developed or are considered for future development.

Safety Element

The Safety Element is designed to allow for planning that will prevent development in areas that may be at risk to natural and human made hazards. Such hazards include seismic activity, flooding, fire hazard areas, and noise impact areas. The overall goal is to protect the public health, welfare, and safety from the potential hazards of flooding, earthquakes, and fire.

Seismic Activity

There are no known faults within the City of Guadalupe. The closest faults are the Pezzoni fault, approximately ten miles south of Guadalupe, and the Santa Maria fault, approximately eight miles to the east. Safety measures related to seismic activity and earthquakes involve prevention of damage and restitution of services. Building requirements should follow recommendations set forth by the California Building Code, which establishes building requirements for all new structures based on predicated earthquake intensities.

The City of Guadalupe will implement the following goals, objectives and policies as set forth in the City's general Plan.

Seismic: Adopt and enforce building and grading codes which protect the City from seismic event damages as outlined in the California Building Code as adopted by the City, and the General Plan.

Figure 11-2: Seismic Hazard

Flooding

Policies to discourage development in hazardous flood areas include:

- Liquefaction: No building will be permitted along the Santa Maria River.
- Encourage passive open space uses within flood plains.
- Prohibit development in floodways.
- New development will not be sited in areas of shallow groundwater.
- Adopt and use the most current edition of the California Building and Fire Codes with local amendments.

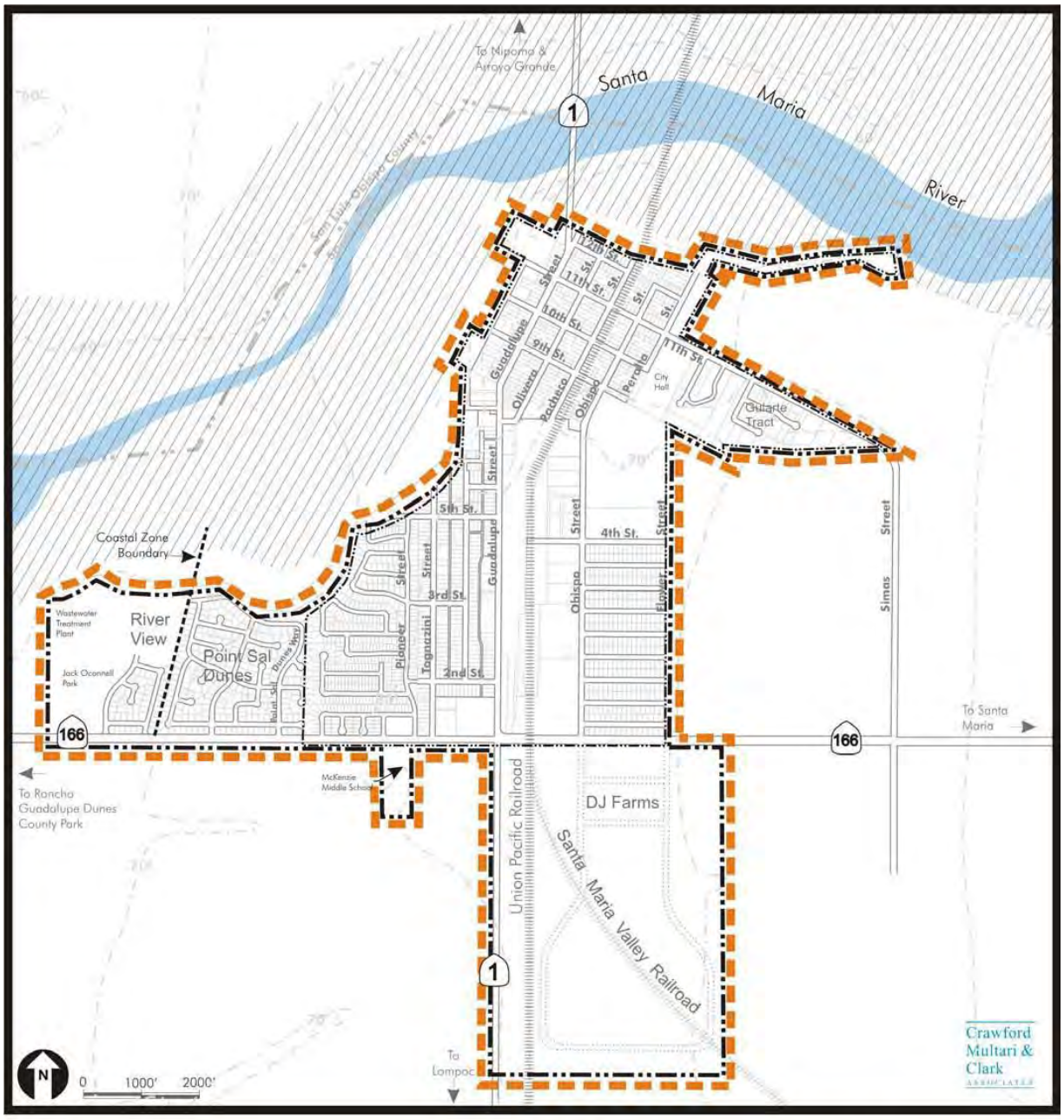


Figure 11-1: Areas Subject to Flooding in a 100-Year Storm

Fire

Fire protection is an important safety consideration for the City of Guadalupe. Fire capabilities of new developments must be carefully planned to give maximum service at minimum cost. Land use, circulation, water and fire service are all important factors of service costs and system adequacy.

The City recognizes the importance of circulation, to minimize response time to fires and other emergencies, and submits all subdivision plans to the Fire Chief for review and approval.

Policies to encourage quicker and better fire response include:

- Every building and development project should be reviewed and approved by the fire department prior to issuance of the building permit.
- Improve water system capabilities as they affect fire service.
- Adopt and use the most current edition of the California Building and Fire Codes with local amendments.

Zoning and Subdivision Ordinances

The State of California has empowered all cities and counties to adopt zoning ordinances. The City of Guadalupe had a five member Planning Commission, which was an advisory body to the City Council. The Commission was established under State law to provide relief in special cases where the exact application of the terms of the ordinance would be unduly restrictive and cause a hardship, in addition to generally reviewing zoning and subdivision proposals. The Planning Commission hears and decides upon the interpretation and the application of the provisions of the Zoning and Subdivision Ordinances. Although the Commission has certain discretionary powers in making its decisions, the Commission must always abide by and comply with the powers granted to it by the local Zoning and Subdivision Ordinances and the State's enabling acts. However, the Planning Commission was dissolved due to financial concerns and all zoning issues are determined by the Guadalupe City Council, which is responsible for all functions of the Planning Commission as described above.

Storm Water Management Program

The City of Guadalupe will be taking steps toward a storm water management program. This program fell victim to the financial shortfalls experienced during the entire previous mitigation

plan. All related assets such as the existing storm water infrastructure, recommended upgrades, necessary permitting and design criteria will be included in the plan. Out of necessity, some of the storm drain shortfalls have been cleared but the project at this time is continuing.

The City of Guadalupe's Public Works Department continually maintains the City's storm water system. The system has approximately 2.1 miles of underground storm water system piping; approximately 1.1 miles of open ditch which affronts agricultural properties and receives field runoff as well as storm runoff; approximately 0.5 miles of open ditch that carries excess water which accumulates in an area known as Guadalupe Wetlands/ Lake and also receives agricultural runoff; 83 drop inlets; 3 box culverts with runs of approximately 125 ft.; and 22 manholes equipped with drop inlets and four outlet sites. This is what functions as the City of Guadalupe's current storm water system.

The goal of the Storm Water Management Program (SWMP) is to protect the health and safety of the public and the environment, meeting Clean Water Act mandates through compliance with Phase II of the National Pollutant Discharge Elimination System (NPDES) permit requirements and applicable regulations. It further fosters heightened public involvement and awareness of discharge risks. Storm drains typically flow into creeks that have already passed through a variety of land uses, including natural, agricultural, urban and industrial, and often through more than one permit jurisdiction. The City is faced with the challenge of requiring and implementing controls to reduce the discharge of pollutants in storm water runoff to the technology-based standard of "Maximum Extent Practicable" (MEP) as required by § 402(p)(3)(B)(iii) of the Clean Water Act, 33 U.S.C. § 1342(p)(3)(B)(iii).

Building Codes

The State of California has adopted the 2016 California Building Codes which becomes effective in January of 2017. These new regulations will be enforced in the City of Guadalupe. The California Uniform Statewide Building Code is based on the International Building Code with State amendments. The City has adopted the 2016 California Building Codes with local amendments and which also become effective in 2017. A copy is available for review in the City's Building & Planning Department.

The City provides for and enforces State, City, and County Codes for building residential and

commercial structures, enforcing environmental codes and guidelines for maintaining existing structures.

The City of Guadalupe has an ISO rating of 4 based on a determination letter dated April 28, 2014. In addition, our ISO rating for buildings was 1.

The ISO is an insurer-supported organization that provides advisory insurance underwriting and rating information to insurers. The ISO uses a rating scale of 1 to 10 with 1 being the highest rating given.

Floodplain Management Ordinance

The NFIP consideration is the responsibility of the Local Planning Team outline in 12.2.3. This Team is responsible for the NFIP updates and application to potential development projects. An extension of the levee to protect the low lying are has been sought and has been identified in the Master plan. Until remedied, the city will not issue building permits in the flood plan without some type of individual mitigation proposed and reviewed by the LPT. Reference to this hazard is located in section 12.4.6 et seq.

The City of Guadalupe refers to the Santa Barbara County Floodplain Ordinance by reference. It is important to note, however, that many parts of the City flood due to storm water infrastructure, not because of their proximity to 100-year floodplain.

The FIRMs were developed through the NFIP and were last updated in September 2005 and made available in GIS format as Digital Flood Insurance Rate Maps. These are shown in Section 5.3.3 which discusses the location and extent of the flooding hazard throughout Santa Barbara County. These are also on file with the Santa Barbara Operational Area Office of Emergency Management, County Flood Control, and online at the Santa Barbara County Public Works Department's website. The FIRMs are used by both the public and private sector to determine flood insurance requirements and rates and to administer the City's Flood Zone Management Ordinance.

Floodplain districts identified in the FIRMs include the following flood hazard zones and definitions:

- **Zone A** is the flood insurance rate zone that corresponds to the 100-year floodplains that are determined in the Flood Insurance Study by approximate methods. Because detailed hydraulic analysis is not performed for such areas, no Base Flood Elevations or flood hazard factors are determined.
- **Zone AO** is the flood insurance rate zone that corresponds to areas of 100- year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
- **Zone A1-A30** is the flood insurance rate zone that corresponds to areas of 100-year flood; base flood elevations and flood hazard factors are determined.
- **Zone B** is the flood insurance rate zone that corresponds to areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood.
- **Zone C** is the flood insurance rate zone that corresponds to areas of minimal flooding.

All potential development projects located within floodplains must follow an established development review process. Developments involving drainage ditches or watercourses in floodplains must receive Federal, State and Local review and permits as required by the Floodplain Administrator and the Guadalupe Municipal Code.

Repetitive Loss Properties

Repetitive loss properties are defined as property that is insured under the NFIP that has filed two or more claims in excess of $1,000 each within any consecutive 10-year period since 1978. The City has several properties on which there have been repetitive flood losses, but they have no insurance.

The primary water flow that affects these "Repetitive Loss" properties originates outside of the jurisdiction of the City of Guadalupe and 100% of the flow pathway is also outside of the City's jurisdiction. The City has been in communication with the various jurisdictional authorities, which include, but are not limited to: U. S. Army Corps of Engineers, Santa Barbara County Flood Control, CA State Regional Water Quality Control Board, U. S. Fish and Wildlife Service, CA Department of Fish & Game, and the owners of private property outside of the City's jurisdiction. The primary need is the continuation of the existing levy system protecting

the low lying areas at the north-west end of the city. Funding sources will continue to be sought to mitigate this ongoing hazard.

SEMS Multi-Hazard Functional Plan

In early October 2004, the City of Guadalupe submitted its Standardized Emergency Management System (SEMS) Multi-Hazard Functional Plan to the State of California for approval. The 2004 plan component remains in effect through this 2016 update. The Plan discussed mitigation in the form of training and exercises, which are essential at all levels of government to make emergency operations personnel operationally ready. All emergency plans should include provisions for training. The objective is to train and educate public officials, emergency response personnel and the public. The best method for training staff to manage emergency operations is through exercises. Exercises are conducted on a regular basis to maintain the readiness of operational procedures.

Exercises provide personnel with an opportunity to become thoroughly familiar with the procedures, facilities and systems which will actually be used in emergency situations. There are several forms of exercises:

- Tabletop exercises provide a convenient and low-cost method designed to evaluate policy, plans and procedures and resolve coordination and responsibilities. Such exercises are a good way to see if policies and procedures exist to handle certain issues.
- Functional exercises are designed to test and evaluate the capability of an individual function such as evacuation, medical, communications or public information.
- Full-scale exercises simulate an actual emergency. They typically involve complete emergency management staff and are designed to evaluate the operational capability of the emergency management system. Hazard Assessment

The City has experienced some staff turnover, layoffs and finally some restoration of services by the hiring of new employees, through the recession. While all previous staff had completed the Introductory SEMS/NIMS training, the staffing changes have resulted in the need for initial training and advanced SEMS/NIMS training based on job responsibilities. The SEMS/NIMS training of employees will be completed prior to the next mitigation plan update.

12.3.7 Development Plan Inclusion

Development in the City of Guadalupe over the last five years in these sub regions, much like the county as a whole, has been limited to infill type projects. One large housing development has broken ground which had been in the planning stage for the past twenty years. This development complied with EIR, is outside any of the identified hazard zones and complies with all current building and safety requirements.

Additionally, there are no other major planned development projects. However, any new major developments will need to meet all current building codes and standards. This includes an assessment of the development against the city General Plan, especially the Safety Element which has incorporated lessons learned from the Multi-Jurisdictional Hazard Mitigation Plan update process.

12.4 HAZARD ASSESSMENT

The Hazard Assessment presented here reflects the City's 2016 review and modifications to the updated risk assessment presented in Sections 5 and 6 of the County Plan. Applicable hazard information from the City's previous plans was incorporated during the development of this section.

A brief description of the community is provided to assist in understanding the hazard assessment. The City of Guadalupe lies approximately three miles from the Pacific Ocean along State Highway 1, which runs through the center of the downtown central business district. It is located 10 miles west of Santa Maria, at the northern border of Santa Barbara County. Surrounding the city on the East, West, and South are several square miles of flat, open agricultural land. After reviewing the localized hazard maps and exposure/loss table above, the following hazards were identified by the Guadalupe LPG 2016 as their top nine.

Table 12.6 City of Guadalupe - Hazard Ranking and Planning Consideration 2016

Hazard Type and Ranking	Planning Consideration Based on Hazard Level
Flood	Significant
Earthquake	Significant
Hazardous Materials Release	Moderate
Train Accident	Moderate
Agricultural Pests and Disease	Moderate
Levee Failure/Dam Failure	Moderate
Tsunami	Limited

12.4.1 Flood

The City of Guadalupe ranked the flooding hazard as being a significant planning concern to the City.

12.4.1.1 Description of Hazard

A flood is a general and temporary condition of partial or complete inundation on land that is normally dry. Several factors determine the severity of floods, including rainfall intensity and duration, antecedent moisture conditions, surface permeability, and geographic characteristics of the watershed such as shape and slope. Other causes can include a ruptured dam or levee, rapid ice or snow melting in the mountains, under-engineered infrastructure, or even a poorly placed beaver dam can overwhelm a river or channel and send water spreading over adjacent land or floodplains.

A large amount of rainfall in a short time can result in flash flood conditions, as can a dam failure or other sudden spill. The National Weather Service's definition of a flash flood is a flood occurring in a watershed where the time of travel of the peak of flow from one end of the watershed to the other is less than six hours.

Another form of flooding occurs when coastal storms produce large ocean waves that sweep across coastlines making landfall. Storm surges inundate coastal areas, destroy dunes, and cause flooding. If a storm surge occurs at the same time as high tide, the water height will be even greater. The County historically has been vulnerable to storm surge inundation associated with tropical storms and El Nino.

12.4.1.2 Location and Extent of Hazard

The geographical location, climate, and topography of the city of Guadalupe make it prone to flooding. In regions such as Santa Barbara County, without extended periods of below-freezing temperatures, floods usually occur during the season of highest precipitations or during heavy rainfalls after long dry spells. Additionally, due to the Mediterranean climate and the variability of rainfall, stream flow throughout the County is highly variable and directly impacted from

rainfall with little snowmelt or base flow from headwaters.

The primary area of flooding is located along the levee at the north and north/west section of the City. That area is at a lower grade than the remainder of the City and has a history of flooding as outlined below. Maps indicating the flood hazard are located in section 15.5.1.

12.4.1.3 History of Hazard

The City of Guadalupe sustained flood damage in February 1993, February 1998, March 2001, December 2010, and March 2011 due to heavy rains. A Local Emergency was declared on February 5, 1998, March 21, 2001, and December 19, 2010 following substantial storm flooding. As a result of the repeated flooding events, City Staff have begun discussions with Santa Barbara County Flood Control, U. S. Army Corps of Engineers and other related entities in an effort to develop a mitigation plan to reduce the potential for future flooding events (See Section 12.3.6.6). A Wetlands Lake with undersized culverts affects Gularte Tract and Mary Buren Elementary School, City Hall and entire downtown core of the city. The areas of most concern for storm-related flooding are the 800 – 900 block of Pioneer Street, 4700 Block of 11th Street, the wastewater treatment plant, and most of the western portion of the City bordering the Santa Maria River. This threat is due to the areas low elevation in relation to the Santa Maria River and the lack of a levee structure between the river and this area. The majority of the western portion of the City faces a moderate to high risk of flooding due to the lack of a levee structure between the Santa Maria River and the properties. Wild land fires have removed vegetation from over 100,000 acres of land in the National Forest to North East of Santa Maria. An increased runoff is expected upon relief from the current drought. A significant portion of this runoff will travel down the Santa Maria River, increasing the threat to the City.

12.4.1.4 Probability of Occurrence

The probability of flooding in Guadalupe is similar to that of Santa Barbara County. A map in the County HMP shows the location of the special flood hazard zones in Santa Barbara County. The flood hazard zones depicted on the map are derived from FEMA's Flood Insurance Rate Maps (FIRM) and indicate the probability of flooding happening over a given period of time. Flood zones are geographic areas that defined varying levels of flood risk. Each zone reflects the

severity or type of flooding in the area. The FIRM boundaries are developed by FEMA to convey flood risk.

12.4.1.5 Climate Change Considerations

Climate change is both a present threat and a slow-onset disaster. It acts as an amplifier of existing hazards. Extreme weather events have become more frequent over the past 40 to 50 years and this trend is projected to continue. Rising sea levels, changes in rainfall distribution and intensity are expected to have a significant impact on coastal communities and cities like Guadalupe.

12.4.2 Earthquake

The City of Guadalupe ranked the earthquake hazard as being a significant planning concern.

12.4.2.1 Description of Hazard

An earthquake is caused by a release of strain within or along the edge of the Earth's tectonic plates producing ground motion and shaking, surface fault rupture, and secondary hazards, such as ground failure. The severity of the motion increases with the amount of energy released, decreases with distance from the causative fault or epicenter, and is amplified by soft soils. After just a few seconds, earthquakes can cause massive damage and extensive casualties.

12.4.2.2 Location and Extent of Hazard

Santa Barbara County Officials have indicated that the City of Guadalupe is located in Seismic Zone 4, which is the highest potential status for earthquake activity in the State of California. Most of the downtown consists of reinforced masonry buildings relieving some of the risk. The City had identified 21 buildings within the city limits that were un-reinforced masonry construction (URM), two of which remain un-reinforced. In 2007, the City Redevelopment Agency allocated approximately $3 million in RDA funds in the form of grants to assist owners of URM buildings in retrofitting their building to seismic safe standards. The RDA has since been dismantled and no longer exists.

Guadalupe has realized a reduced threat from URM buildings, but many of the non-URM buildings in the city are more than 50 years old and are subject to damage due to an earthquake. Public facilities and a significant portion (>70%) of the residential occupancies within the city are old construction and have a potential for incurring serious damage in the event of an earthquake. The State of California deadline for retrofitting of URM buildings was December 31, 2012. All non-retrofitted buildings are deemed uninhabitable and posted as such. Legal research will be needed to determine a defensible plan of action and submitted to the City Council for direction regarding the long term solution for the remaining URM buildings.

12.4.2.3 History of Hazard

On December 22, 2003 at 11:15 in the morning a magnitude 6.5 earthquake struck the central California coast. The event, known as the San Simeon Earthquake, was located 11 kilometers northeast of San Simeon, and 39 kilometers west/northwest of Paso Robles. Although the San Simeon Earthquake had a more significant impact on San Luis Obispo County, the event was reportedly felt as a MMI VI in Guadalupe and Santa Maria and as a MMI V in Lompoc, Santa Ynez and Solvang. According to reports on the San Simeon earthquake by the U.S. Geological Survey and U.C. Berkeley Seismological Laboratory, two (2) people were killed, 40 people were injured, over 40 buildings collapsed or were severely damaged and more than 10,000 homes and businesses were without power. The most severe damage was to un-reinforced masonry (URM) structures that had not yet been retrofitted to better withstand earthquakes. There was minor damage to more than 30 URM buildings in the City of Guadalupe.

12.4.2.4 Probability of Occurrence

Statewide, the rate of earthquakes around Magnitude 6.7 (the size of the 1994 Northridge earthquake) has been estimated to be one per 6.3 years (more than 99% likelihood in the next 30 years); in southern California, the rate is one per 12 years (93% likelihood in the next 30 years).

12.4.2.5 Climate Change Considerations

To date, no credible evidence has been provided that links climate to earthquakes; however, climate and weather does play a significant role in the response and recovery from earthquakes. Effects from climate change could create cascading complications and impacts.

12.4.3 Hazardous Material Release

The City of Guadalupe ranked the Hazardous Material Release as being a moderate planning concern.

12.4.3.1 Description of Hazard

As defined by the Code of Federal Regulations (CFR), a hazardous material means a "substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and has designated as hazardous under section 5103 of Federal hazardous materials transportation law (49 USC. 5103). The term includes hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, materials designated as hazardous in the Hazardous Materials Table (see 49 CFR 172.101), and [other specified materials]." (49 CFR § 105.5)

Hazardous materials include:

- Explosives
- Flammable, non-flammable, and poison gas
- Flammable liquids
- Flammable, spontaneously combustible, and dangerous when wet solids
- Oxidizers and organic peroxides
- Poisons and infectious substances
- Radioactive materials
- Corrosive materials

The term "release" includes spilling, leaking, pumping, pouring, emitting, emptying, discharging, escaping, leaching, dumping, or disposing into the environment of any hazardous material. Hazardous Materials Releases (HMRs) may be intentional or accidental, and may occur at fixed facilities or on transport vehicles.

HMRs are harmful in three ways:

1. Life safety concerns. Chemical, biological, and radiological agents can cause significant health risks to those exposed to them; biological agents can be additionally dangerous if they are infectious. Flammable and explosive materials also present life safety concerns if they are exposed to heat and/or flame.
2. Environmental cleanup. Release of a hazardous material requires clean-up per environmental regulatory requirements. This could be simple or could require costly and time-consuming clean-up actions to remediate the contaminated areas and/or materials, and people and/or animals exposed by the release

3. Operational delays. Delays caused by a HMR could lead to significant economic losses due to traffic delays (mobile or airborne releases) or operational shut-down (fixed facilities).

Most HMRs occur with little or no warning. In some cases, such as with gases and biological hazards, they can be difficult to detect until symptoms present themselves in those affected. HMRs can occur at fixed facilities or during transit. HMRs at fixed facilities may be external or internal. External releases may involve industrial storage, fires, or malicious acts and may create airborne plumes that can affect a wide area and last for hours or days. Internal releases can be localized or widespread depending on the transmissibility of the material and transmission routes. For example, if the material is transmissible through air and located near an intake, it can be distributed throughout the building through the heating/ventilation system. Hazardous materials are primarily transported by road, rail, ship, or air. The majority of mobile releases are due to accidents on highways, but can occur as a result of incidents on railroads, in the air, or on boats.

12.4.3.2 Location and Extent of Hazard

The City of Guadalupe has several industries that use hazardous materials. The agricultural industry uses large quantities of ammonia to operate their refrigeration systems, and there are significant quantities of fertilizers and pesticides stored and dispensed in the community and surrounding land. In addition, Highways 1 and 166 pass through the community and local and interstate trucks regularly pass through the city. One of the primary threats to the community from these trucks is the large quantities of diesel fuel they carry and the close proximity of the highways to storm drainage systems that serve the region.

In addition, any long-term closure of Highways 1 or 166 due to an incident related to these highways will severely limit access to the City by mutual aid providers and disaster relief assistance. The closure of Highways 1 or 166 could also significantly affect the City's economy as we are dependent on upon sales tax dollars.

12.4.3.3 History of Hazard

One significant hazardous material incident occurred in 1990. A large explosion occurred while welding a gasoline tank which had fatal results and caused significant damages to surrounding buildings. While the risk of other hazardous material incidents has increased with larger

quantities of material storage, our occurrence level remains low.

12.4.3.4 Probability of Occurrence

The most likely scenario in Guadalupe is a hazardous material spill due to a release from one of the agricultural facilities.

The City of Guadalupe Fire Department works closely with local industry and monitors and audits risk management and prevention programs. The City of Guadalupe Fire Department is also involved with Hazardous Material guidelines per CUPA (County Fire Hazardous Material Unit) established Business Plans are complied with. Regular site visits are also performed with CUPA. Professional response training has been provided to the Firefighters by the largest agriculture cooler in the city.

12.4.3.5 Climate Change Considerations

Weather can play a significant factor in hazardous material releases. While there is little evidence to link climate change increase occurrences of hazardous material releases, it could impact the response and recovery efforts.

12.4.4 Train Accident

The City of Guadalupe ranked the train accident hazard as being a moderate planning concern to the City.

12.4.4.1 Description of Hazard

Train accidents are defined as any accidents involving public or private trains carrying passengers or cargo along the rail corridor. Train accidents, like other transportation accidents, are less likely to lead to a state or federal disaster declaration, than other hazards previously and afore mentioned.

12.4.4.2 Location and Extent of Hazard

The Union Pacific Railroad bisects the City from north to south paralleling Highway 1 adjacent to the main downtown corridor of the City. The railroad carries both passengers and cargo through the City on a daily basis. While the City has only had two derailment incidents in recent history, the potential for train-related incidents are ever-present, and some of the cargo carried by the

trains include hazardous materials. Another concern is that in some areas of the City, the trains pass in very close proximity to residential and commercial occupancies (in some cases within +-35 feet), which provides a potential threat to the occupants of these structures. Due to the fact that the railroad passes through the downtown corridor of the City, should a train carrying hazardous materials be involved in an incident and those materials are released, the entire City could be at significant risk. Consequently, any derailment with hazardous materials on board with even a remote potential for release or fire would require an evacuation of all persons from the City of Guadalupe.

In addition, any incident along the railroad right-of-way could adversely affect the ability of emergency services to respond to calls for service in a timely manner. The long-term closure of Highways 1 or 166 could also significantly affect the City's economy as we are dependent local commerce.

12.4.4.3 History of Hazard

Two known train derailments in the City of Guadalupe history are known. The first derailment occurred in 1952 and the second around 2005. In the most recent incident, box cars derailed exposing their commercial product that was subjected to looting. Surrounding damage was minimal and there is no record of injury during that incident.

An earlier incident occurred in the 1940's or 1950's which was caused substantially more property damage but no documentation could be located to better define the extent of the event.

12.4.4.4 Probability of Occurrence

Recent interests in expanding the use of the Phillips processing plant located to our north would significantly increase the number of rail passages through the City of Guadalupe. As proposed, the movement of hazardous and flammable materials could raise the risk assessment for rail transportation. In October of 2016, the project was rejected by San Luis Obispo County but an appeal is anticipated. Should the proposal gain approval, our risk assessment for rail transportation would require a review based on volume and types of materials. Even with approval, the preparation of the site for the expanded processing service would likely take years and offer sufficient time to address the mitigate action to the increased risk.

12.4.4.5 Climate Change Considerations

There is no known linkage between climate change and train accidents.

12.4.5 Agricultural Pests and Disease

The City of Guadalupe ranked the Agricultural Pests and Disease hazard as being a moderate planning concern to the City.

12.4.5.1 Description of Hazard

Agricultural pests and disease infestation occur when an undesirable organism inhabits an area in a manner that causes serious harm to agriculture crops, livestock or poultry, and wild land vegetation or animals. Countless insects and diseases live on, in, and around plants and animals in all environments. Most are harmless, while some can cause significant damage and loss. Under some conditions, insects and diseases that have been relatively harmless can become hazardous. For example, severe drought conditions can weaken trees and make them more susceptible to destruction from insect attacks than they would be under normal conditions.

12.4.5.2 Location and Extent of Hazard

The agriculture industry is a major factor in the City's economy. The City is surrounded by agricultural activities, employing thousands of people, which contributes significantly to the local economy. The City is home to a multi-million dollar produce processing facility that employs several hundred community residents. There are several different threats to the agricultural industry locally. The threats include, but are not limited to; pest infestation, disease, intentional vandalism and terrorism, fallout from the Diablo Canyon Power Plant, and adverse weather. With agriculture being such a vital industry to the community, the loss of any portion of this industry would be devastating to the local economy and it is in the City's best interest to work toward protecting this vital industry.

12.4.5.3 History of Hazard

Santa Barbara County has a history of insect infestation. Infestations of Mediterranean Fruit Fly, Oriental Fruit Fly, Gypsy Moth, Glassy-winged Sharpshooter, Asian Citrus Psyllid, and Light-

Brown Apple Moth have all occurred in the last 30 years. Diseases such as Chrysanthemum White Rust and Pierce's Disease of Grapes have caused significant losses to local growers.

12.4.5.4 Probability of Occurrence

Due to its interaction with the global economy, its mild Mediterranean climate, and its diversified agricultural and native landscape, Guadalupe currently experiences and will continue to experience periodic losses due to agricultural pests and diseases.

12.4.5.5 Climate Change Considerations

Farmers contend with a wide range of crop-damaging pests and pathogens. Continued climate change is likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates. For example, the pink bollworm, a common pest of cotton crops, is currently a problem only in southern desert valleys because it cannot survive winter frosts elsewhere in the state.

12.4.6 Levee Failure/Dam Failure

The City of Guadalupe ranked the hazard from Levee failure/Dam failure, as being a limited risk to the City.

12.4.6.1 Description of Hazard

There are several areas in California that use levees to protect land from peak flood levels and/or to protect land that is below sea level. The first type of levee should be designed to withstand peak flood levels that are caused by rapid snow melt or intense rainfall within the watershed. The second type of levee should be designed to withstand nominal water levels on a continuous basis as well as peak flood levels. Failure of levees is defined as conditions that breach and/or degrade the levees.

In California, levees protect farmland, ranchland, rural residential areas, urban residential areas, and infrastructure such as roads, highways, and waterways or canals.

Dams fail due to old age, poor design, structural damage, landslides flowing into a reservoir, or

terrorist actions. Structural damage is often a result of a flood, erosion, or earthquake. A catastrophic dam failure could inundate the area downstream. The force of the water is large enough to carry boulders, trees, automobiles, and even houses along a destructive path downstream. The potential for casualties, environmental damage, and economic loss is great. Damage to electric generating facilities and transmission lines could impact life support systems in communities outside the immediate hazard area.

12.4.6.2 Location and Extent of Hazard

The Santa Maria River travels along the northern border of the City. There is an existing levee along the south side of the river, which ends at the intersection of Highway 1. Along the northern border of the City, west of Highway 1, there is no levee structure and the primary protection from river flooding in that area is the difference in elevation between the river and adjacent properties. The estimated difference in elevation between the river and adjacent properties ranges from approximately 10 to 15 feet. The lack of a levee structure leaves the commercial, residential, agricultural, and open space properties within this area at risk of flooding should there be major rains or a failure of the Twitchell Dam (See Section 12.3.6.6).

12.4.6.3 History of Hazard

The construction of the Santa Maria River Levee was completed in 1963 by the U.S. Army Corps of Engineers. The levee was constructed to provide protection against flooding and debris flow from the City of Santa Maria; including the main business district (overflow area), adjacent agricultural lands in the Santa Maria Valley, and valuable residential, commercial, industrial, and public properties which would likely be subject to flooding. In addition, protection is available for US Highway 101, State Highway 1, Southern Pacific Railroad, Santa Maria Valley Railroad, three highway bridges, and one railroad bridge; all of which were previously subject to overflow in the Santa Maria Valley. Without protection from the levees, the standard project flood would inundate most of the Santa Maria Valley, including 80% of the city of Santa Maria.

The Santa Maria River Levee was designed to protect Santa Maria Valley from a standard project flood ranging in magnitude from 150,000 cubic feet per second (cfs) at the downstream

end of the left levee to up to 160,000 cfs at Fugler Point. The Bradley Canyon Levees and channel improvements were designed to accommodate the standard project flood, which can range in magnitude from 7,000 to 9,000 cfs. However, flood flows much less than the design discharges significantly damaged the levee system in 1966, 1969, 1980 and 1998. Damages from each of these floods occurred at different locations, under relatively low flow conditions, and were caused by flow impingement on the levee structure. In 1981 about a fourth of the project was protected from further undermining with groins and other features but a subsequent 600 ft breach in 1998 in a reach without groins indicating that future damage was likely.

In 2009, the Army Corps of Engineers improved the riverside slope of south levee with soil cement revetment and steel sheet pile wall protection from Blosser Road to the Bradley Canyon confluence. A portion of the Bradley Canyon levee was also improved in 2013.

The State of California and the federal government have a rigorous Dam Safety Program. This is a proactive program that ensures proper planning in the event of failure but also sets standards for dam design and maintenance. Because of this, many potential issues have been addressed and/or resolved. Prior to the implementation of this program Santa Barbara did experience a dam related incident.

Built in 1917, the Sheffield Dam only survived for eight years, failing catastrophically during an earthquake in 1925. It was built on sandy soil which liquefied during the event. The center 300-feet of the 720-feet long dam broke off and was carried away on the liquefied soil, spilling 30 million gallons of water. Damage estimates are unavailable.

12.4.6.4 Probability of Occurrence

Several floods have occurred since the levees were constructed, each with relatively low peak discharges. Because the natural channel averages about 2,000’ in width, the floods did not fill the channel but meandered and impinged against the existing levees. This impingement undermined the levee toe causing considerable damage and jeopardized adjacent properties, demonstrating that the levee was vulnerable to smaller discharges and as a result would not provide the protection for which it was designed. The levee improvements by the Corps will reduce the probability of impinging flows undermining the levee in critical areas. Those portions of the levee that were not improved will still be subject to the possibility of

undermining and failure.

Dam failure events are infrequent and usually coincide with the events that cause them, such as earthquakes, landslides and excessive rainfall and snowmelt. There is a "residual risk" associated with dams; residual risk is the risk that remains after safeguards have been implemented. For dams, the residual risk is associated with events beyond those that the facility was designed to withstand. However, the probability of occurrence of any type of dam failure event is considered to be low in today's regulatory and dam safety oversight environment.

12.4.6.5 Climate Change Considerations

Increased rainfall, runoff, and snow pack melt from climate change could generate more water than the levees were designed to support. Additionally, climate change conditions could damage earthen levees creating weaknesses that would also reduce its level of protection.
Increased rainfall from changing climate conditions could present a risk to dams in Santa Barbara County if volume of runoff is greater than the dam's capacity. This could cause the County to release stored water into the downstream water courses in order to ensure the integrity of the dam.

12.4.7 Tsunami

The City of Guadalupe ranked the hazard from Tsunami, as being a limited risk to the City.

12.4.7.1 Description of Hazard

A tsunami is a series of long waves generated in the ocean by a sudden displacement of a large volume of water. Underwater earthquakes, landslides, volcanic eruptions, meteoric impacts, or onshore slope failures cause this displacement. Tsunami waves travel at speeds averaging 450 to 600 miles per hour. As a tsunami nears the coastline, its speed diminishes, its wavelength decreases, and its height increases. Depending on the type of event that creates the tsunami, as well the remoteness of the event, the tsunami could reach land within a few minutes or after several hours. Low-lying areas could experience severe inland inundation of water and deposition of debris more than 3,000 feet inland.

12.4.7.2 Location and Extent of Hazard

The City of Guadalupe is located approximately three miles from the Pacific Ocean. According to the latest edition of the Santa Barbara County Tsunami Inundation Maps, the City is outside of the tsunami threat zone.

12.4.7.3 History of Hazard

The relative threat for local tsunamis in Santa Barbara can be considered low due to low recurrence frequencies. Large, locally-generated tsunamis are estimated to occur once every 100 years. Thirteen possible tsunamis have been observed or recorded from local earthquakes between 1812 and 1988. These tsunami events were poorly documented and some are very questionable.

12.4.7.4 Probability of Occurrence

The University of Southern California (USC) Tsunami Research Group has modeled areas in Santa Barbara County that could potentially be inundated in the event of a tsunami. This model is based on potential earthquake sources and hypothetical extreme undersea, near-shore landslide sources. The data was mapped by Cal OES for the purpose of Tsunami Evacuation Planning. Extreme tsunami inundation areas were mapped and used to profile maximum potential exposure.

The threat of a tsunami to the City cannot be totally dismissed, and thus will be included in this plan. While the City is considered outside of the tsunami threat zone, there are tsunami-related threats that could adversely affect the City. Those threats include, but are not limited to: increased traffic and the associated potential for traffic collisions as a result of evacuations of other nearby communities, and potential damage to the groundwater basin due to salt water intrusion.

12.4.7.5 Climate Change Considerations

Tsunamis are created by earthquakes or other earth movements, to date, no relationship has

been made between climate change and the occurrences of earthquakes or other earth movements.

The City of Guadalupe ranked the hazard from Tsunami, as being a limited risk to the City.

12.5 VULNERABILITY ASSESSMENT

The purpose of this section is to estimate the potential vulnerability (impacts) of hazards within the city on the built environment (residential, non-residential, critical facilities, etc.) and population. To accomplish these two (2) different approaches will be used: 1) analysis of exposure of critical facilities to hazards; and 2) a qualitative estimate of the impacts to hazards. It is important to note that the first approach can only be applied to hazards that have an exposure area (footprint). For those hazards where an exposure layer does not exist, a brief qualitative assessment of the potential vulnerability will be presented.

Analysis of Exposure of Critical Facilities to Hazards

The City of Guadalupe identified 12 critical facilities to be included in the Vulnerability Assessment portion of the plan. These facilities primarily included utilities, government, and educational structures. Of the data that was available, it was shown that these buildings are worth approximately $170 million in structure value.

The results of the critical facilities shown to be impacted (at least moderately) from each hazard are shown in the table below:

Vulnerability	Specific Risk	% of Critical Facilities Impacted	Exposure
Flood			
	FEMA Flood Zone	0%	$0
	Flood Overlay Zone	0%	$0
Fire			
	Fire Severity Zone	0%	$0
	Fire Threat	92%	$98,500,000
Dam Inundation/Levee Failure		100%	$103,500,000
Hazardous Materials Release		100%	$103,500,000
Train Accident		50%	$57,000,000
Earthquake			
	Groundwater/Liquefaction Severity	100%	$103,500,000

	Peak Ground Acceleration	100%	$103,500,000
Agricultural Pests		0%	$0
Tsunami		0%	$0

It is worth noting that a majority of the City of Guadalupe critical facilities evaluated were at least moderately impacted by the following threats:

- Flooding – Rain Storms
- Dam (Twitchell) Failure
- Hazardous Materials Release
- Train Derailment
- Earthquake
- Groundwater/Liquefaction Severity

As the City continues to assess its vulnerability the collection of better data will help to improve the risk assessment process in order to direct planning and mitigation decisions.

Table 12.8 presents the 12 identified critical facilities and available values. The Map ID number for each critical facility corresponds to those found on the following maps showing the location of the critical facilities in relation to the County's profiled hazards. Using a GIS and the data shown in these maps, it was determined which critical facilities are exposed to which hazards by whether or not they fall within the mapped hazard area. The results of the exposure analysis are included in this section.

Table 12.8 Guadalupe Critical Facilities

Map ID	Critical Facility	Address	Bldg Value
1	Pioneer Street Water Tank and Equipment	500 Block Pioneer St	$8,500,000
2	Wastewater Treatment Plant	5200 West Main St	$28,000,000
3	McKenzie Junior High School	4710 West Main St	$28,500,000
4	Obispo Street Water Tank and Equipment	300 Obispo St	$7,000,000
5	Mary Buren Elementary School	1050 Peralta Street	$35,200,000
6	City Hall	918 Obispo Street	$20,000,000
7	Guadalupe Senior Citizen Center	4545 10th Street	$3,500,000
8	Tenth Street Water Tank and Equipment	4550 10th Street	$7,000,000
9	Fire Station #1 and Veterans Memorial Building	1025 Guadalupe Street	$15,000,000
10	Boys and Girls Club	4691 11th Street	$2,500,000
11	La Guardia St. Sewer Lift Station	4200 La Guardia	$7,000,000
12	Pioneer St. Sewer Lift Station	800 Pioneer Street	$7,000,000

Of the critical facilities identified above, numbers 1, 2, 4, 6, 7, 8, 9, 10, 11, and 12 are owned by the City of Guadalupe. The remaining two facilities, numbers 3 & 5, are owned by the Guadalupe Union School District.

The baseline used for valuation is the replacement cost to each facility. Using the analogy of a disaster which causes a catastrophic and un-repairable damage, the functions are too critical to eliminate its use and would need to be rebuilt.

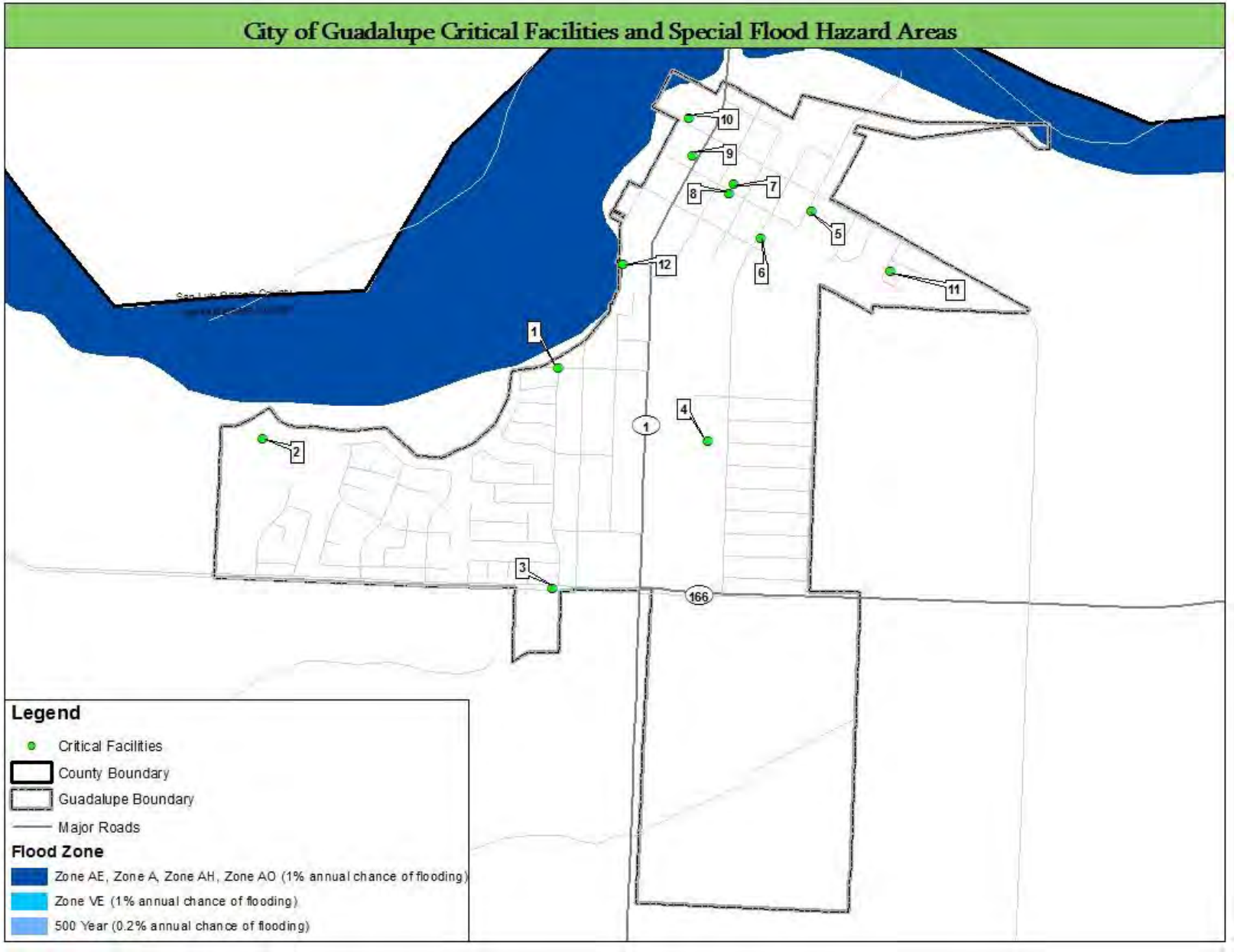
While the valuations are believed to be valid for 2016, the actual replacement cost could escalate sharply depending on many factors at the time of an actual loss. These figures are estimates only and not derived from an actual appraisal. It is important to note that the risk assessment is designed to focus on the facilities and the numbers are provided to identify a potential financial exposure.

12.5.1 Flood Vulnerability

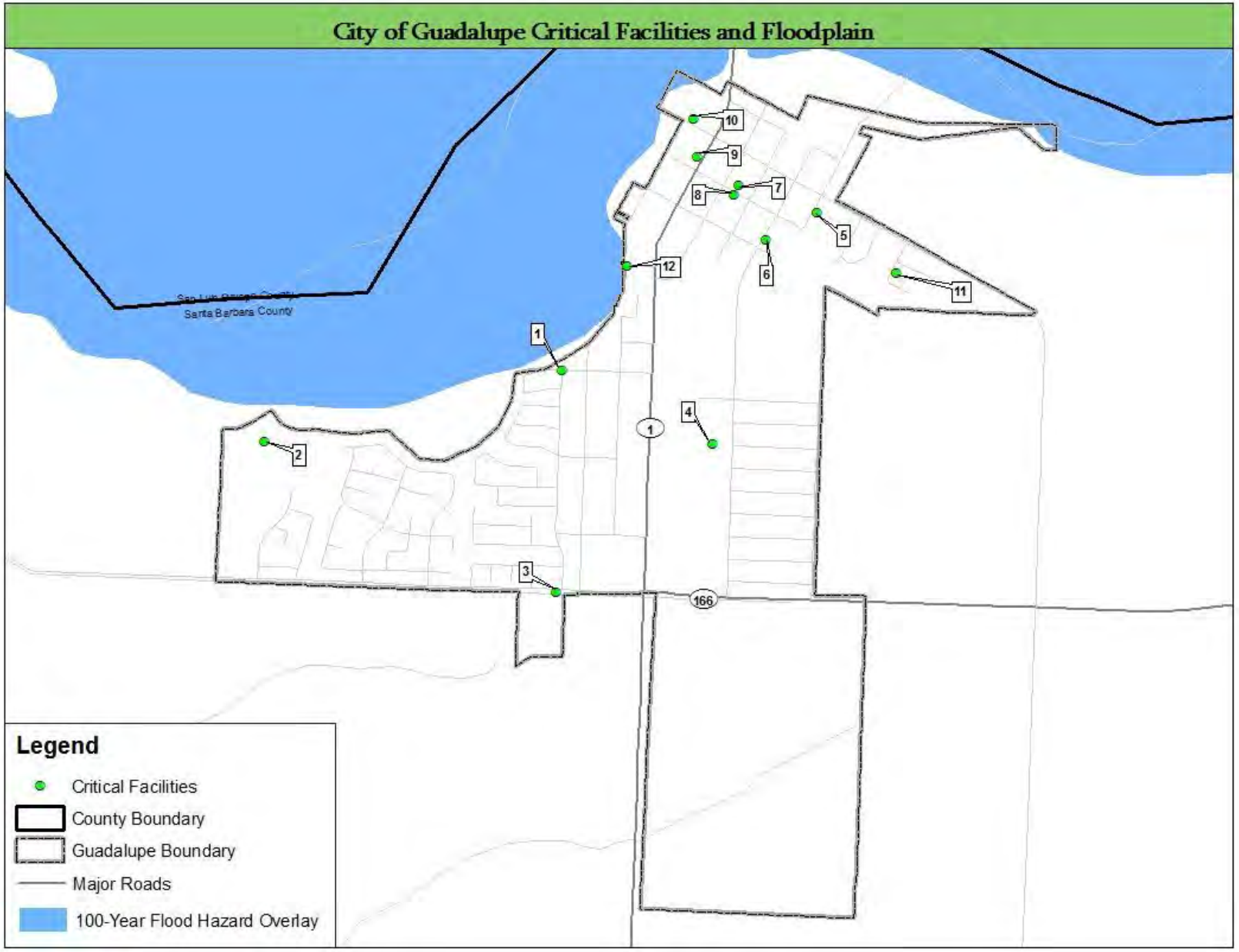
			Flood Hazard	
Map ID	**Critical Facility**	**Bldg Value**	**FEMA Flood Zone**	**Flood Overlay Zone**
1	Pioneer Street Water Tank and Equipment	$8,500,000	Outside Floodplain	Outside Flood Overlay Zone
2	Wastewater Treatment Plant	$28,000,000	Outside Floodplain	Outside Flood Overlay Zone
3	McKenzie Junior High School	$28,000,000	Outside Floodplain	Outside Flood Overlay Zone
4	Obispo Street Water Tank and Equipment	$7,000,000	Outside Floodplain	Outside Flood Overlay Zone
5	Mary Buren Elementary School	$35,200,000	Outside Floodplain	Outside Flood Overlay Zone
6	City Hall	$20,000,000	Outside Floodplain	Outside Flood Overlay Zone
7	Guadalupe Senior Citizen Center	$3,500,000	Outside Floodplain	Outside Flood Overlay Zone
8	Tenth Street Water Tank and Equipment	$7,000,000	Outside Floodplain	Outside Flood Overlay Zone
9	Fire Station #1 and Veterans Memorial Bld	$15,000,000	Outside Floodplain	Outside Flood Overlay Zone
10	Boys and Girls Club	$2,500,000	Outside Floodplain	Outside Flood Overlay Zone
11	LaGuardia St. Sewer Lift Station	$7,000,000	Outside Floodplain	Outside Flood Overlay Zone
12	Pioneer St. Sewer Lift Station	$7,000,000	Outside Floodplain	Outside Flood Overlay Zone
	Exposure	**169,200,000**	**$0**	**$0**

None of the critical facilities are located within a known floodplain. Although all facilities are located outside of the flood overlay zone, other flooding risk may still remain based on a critical infrastructure failure, such as a broken water distribution pipe. The anticipated flood hazard from a natural disaster remains low. These same critical facilities may be at risk through various threats.

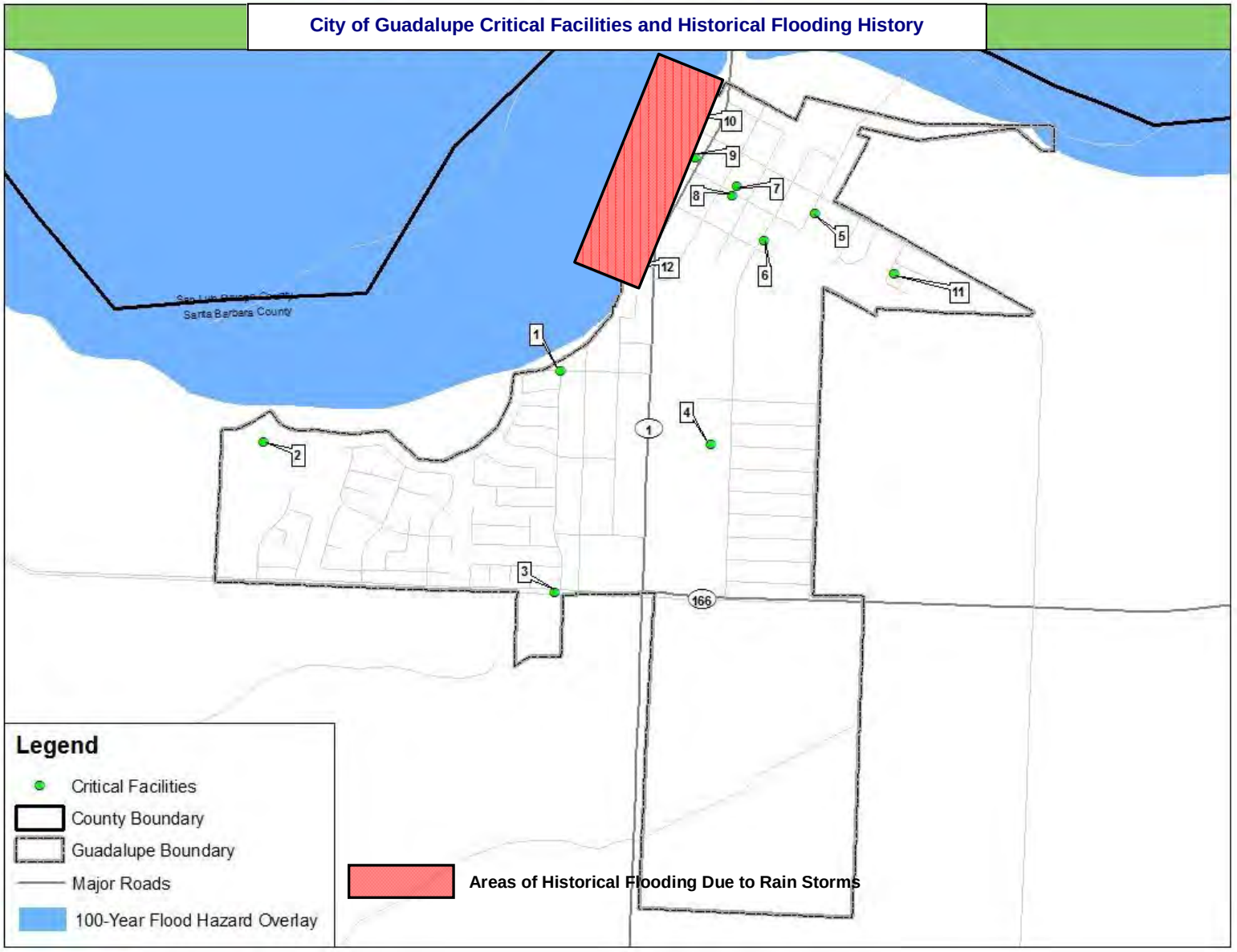
An area of repetitive flooding exists along the level in the north-west corner of the city. The existing levee was upgraded protecting the City of Santa Maria and travels to the City of Guadalupe stopping at Highway One. In the low lying area beyond the levee exists repetitive flooding impacting some housing, a public park and the Boys and Girls Club. Insufficient funds exist to raze the youth center and rebuild on higher ground. More importantly, heavy floodwater inundation further downstream endangers the wastewater treatment facility at the top of the bluff overlooking the Santa Maria River. This risk is significant and could have catastrophic results attempting to continue habitable residences with the loss of a wastewater treatment facility.



Source: Flood Insurance Rate Map (FIRM) Boundaries, Santa Barbara County GIS



Source: Overlay – Flood Hazard, Santa Barbara County GIS


City of Guadalupe Critical Facilities and Historical Flooding History
Santa Barbara County
1
2
3
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10
11
12
166
Legend
Critical Facilities
County Boundary
Guadalupe Boundary
Major Roads
100-Year Flood Hazard Overlay
Areas of Historical Flooding Due to Rain Storms

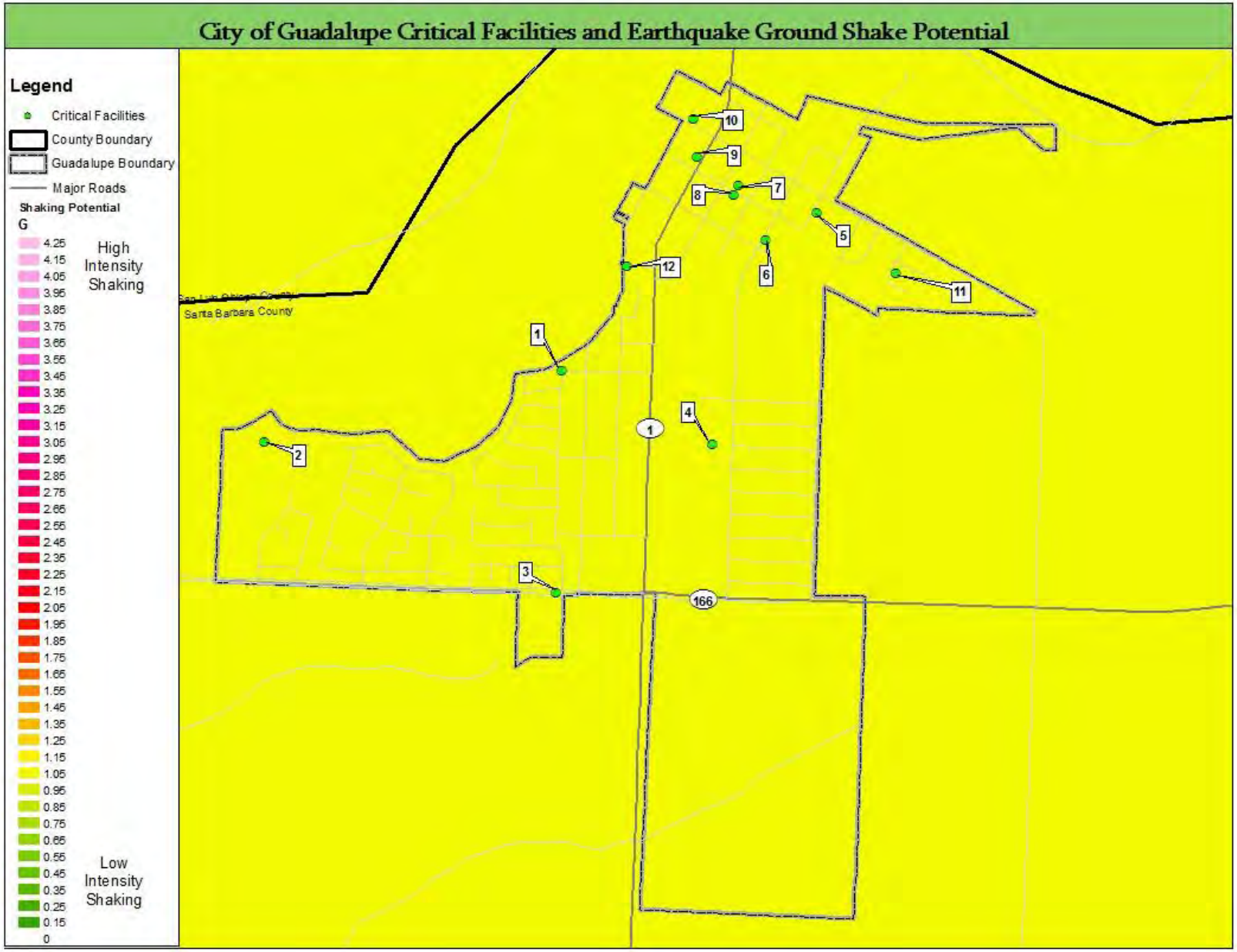
12.5.2 Earthquake Vulnerability

Map ID	Critical Facility	Bldg Value	Groundwater/Liquefaction Severity	Peak Ground Acceleration
1	Pioneer Street Water Tank and Equipment	$8,500,000	High/High	1.05
2	Wastewater Treatment Plant	$28,000,000	High/High	1.05
3	McKenzie Junior High School	$28,500,000	High/High	1.05
4	Obispo Street Water Tank and Equipment	$7,000,000	High/High	
5	Mary Buren Elementary School	$35,200,000	High/High	1.05
6	City Hall	$20,000,000	High/High	1.05
7	Guadalupe Senior Citizen Center	$3,500,000	High/High	1.05
8	Tenth Street Water Tank and Equipment	$7,000,000	High/High	1.05
9	Fire Station #1 and Veterans Memorial Building	$15,000,000	High/High	1.05
10	Boys and Girls Club	$2,500,000	High/High	1.05
11	LaGuardia St. Sewer Lift Station	$7,000,000	High/High	1.05
12	Pioneer St. Sewer Lift Station	$7,000,000	High/High	1.05
	Exposure	**$169,200,000**	**$169,200,000**	**1.05**

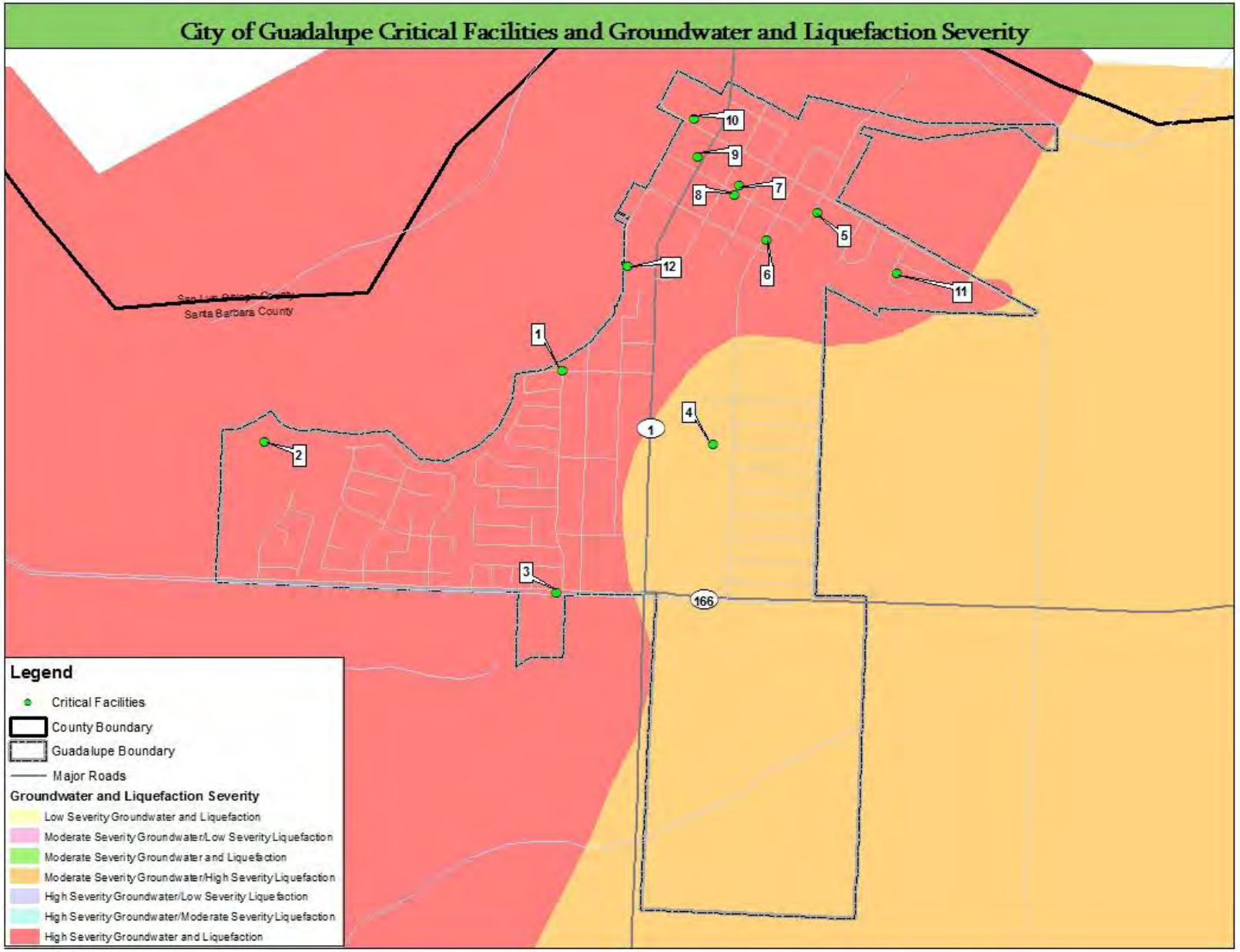
Note: Although the Obispo Street Water Tank and Equipment are mapped in the Moderate zone for groundwater/liquefaction severity, the City of Guadalupe considers this facility at High risk.

Most of the downtown consists of reinforced masonry buildings relieving some of the risk. The City had identified 21 buildings within the city limits that were un-reinforced masonry construction (URM), two of which remain un-reinforced. In 2007, the City Redevelopment Agency allocated approximately $3 million in RDA funds in the form of grants to assist owners of URM buildings in retrofitting their building to seismic safe standards. The RDA has since been dismantled and no longer exists.

Guadalupe has realized a reduced threat from URM buildings, but many of the non-URM buildings in the city are more than 50 years old and are subject to damage due to an earthquake. Public facilities and a significant portion (>70%) of the residential occupancies within the city are old construction and have a potential for incurring serious damage in the event of an earthquake. The State of California deadline for retrofitting of URM buildings was December 31, 2012. All non-retrofitted buildings are deemed uninhabitable and posted as such. Legal research will be needed to determine a defensible plan of action and submitted to the City Council for direction regarding the long term solution for the remaining URM buildings.



Source: Seismic Shaking Hazard, Obtained from California Geological Survey.



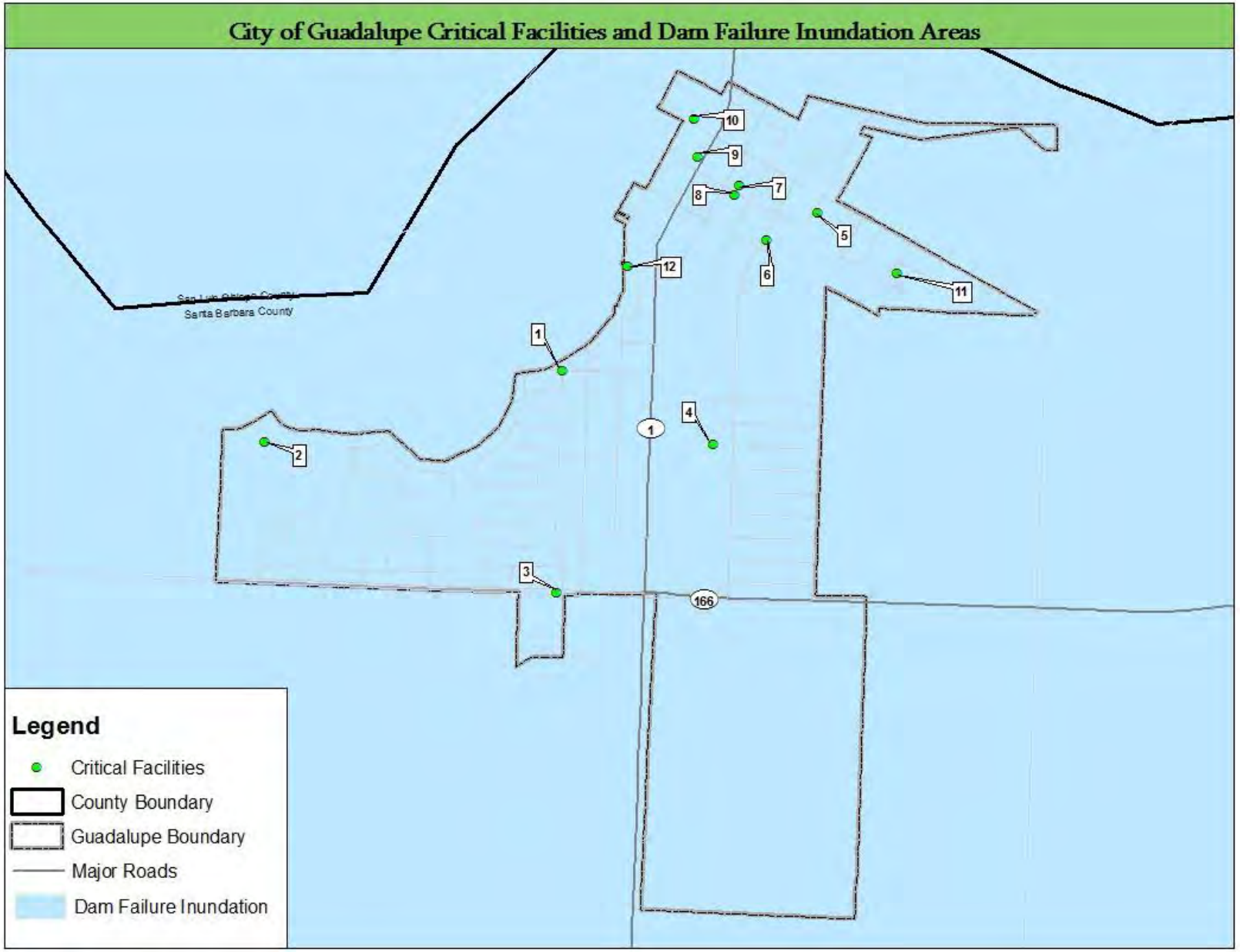
Source: Groundwater Liquefaction, Santa Barbara County GIS

12.5.3 Dam/ Failure Vulnerability

Map ID	Critical Facility	Bldg Value	Dam Inundation Zone
1	Pioneer Street Water Tank and Equipment	$8,500,000	Twitchell Inundation Zone
2	Wastewater Treatment Plant	$28,000,000	Twitchell Inundation Zone
3	McKenzie Junior High School	$28,500,000	Twitchell Inundation Zone
4	Obispo Street Water Tank and Equipment	$7,000,000	Twitchell Inundation Zone
5	Mary Buren Elementary School	$35,200,000	Twitchell Inundation Zone
6	City Hall	$20,000,000	Twitchell Inundation Zone
7	Guadalupe Senior Citizen Center	$3,500,000	Twitchell Inundation Zone
8	Tenth Street Water Tank and Equipment	$7,000,000	Twitchell Inundation Zone
9	Fire Station #1 and Veterans Memorial Building	$15,000,000	Twitchell Inundation Zone
10	Boys and Girls Club	$2,500,000	Twitchell Inundation Zone
11	LaGuardia St. Sewer Lift Station	$7,000,000	Twitchell Inundation Zone
12	Pioneer St. Sewer Lift Station	$7,000,000	Twitchell Inundation Zone
	Exposure	**$169,200,000**	**$169,200,000**

The City is aware of the possibility that an old landfill site may be present just outside of the city limits (Info per Santa Barbara County Environmental Health Department). This site is generally located north of the city limits, in the vicinity of Peralta Street, between existing commercial and agricultural uses and the Santa Maria River Levee. Should the existing levee fail, the resultant flooding could unearth the old landfill contents and distribute them throughout the area. Further research is on-going as to the status of this suspected landfill site.

Property adjacent to and in the water flow area as identified by the Twitchell Dam inundation maps must be evacuated during a levee failure. The facilities that may qualify for temporary housing and/or temporary shelters are within the identified inundation zone and thus are not available. The City does not have a suitable relocation facility and thus evacuations will require re-location outside of the City. The City's contract Engineer will review flood protection considerations when new projects go through the City's approval process, the Planning Commission, and City Council.

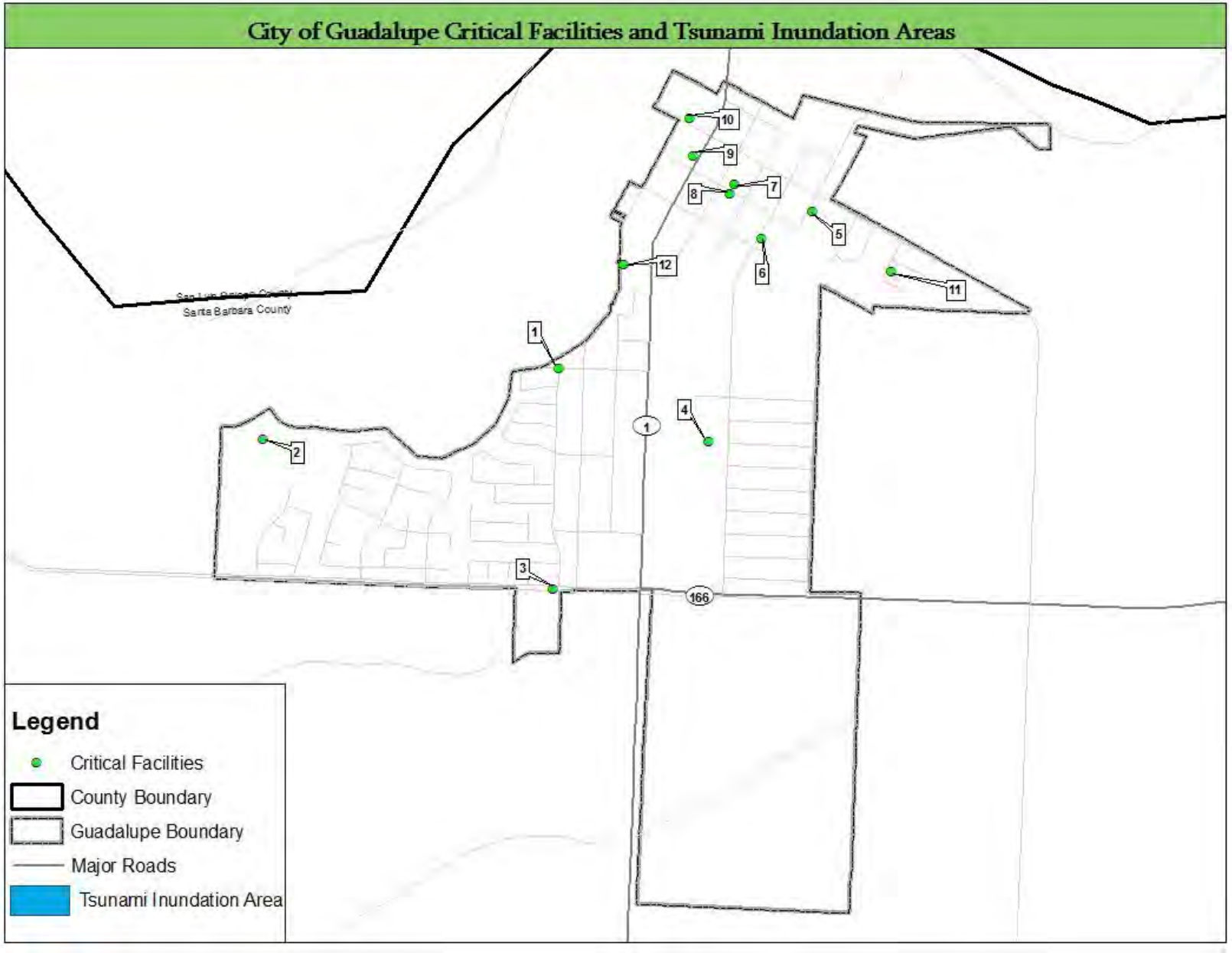


Source: Santa Barbara County Flood Control and Water Conservation District

12.5.4 Tsunami Vulnerability

Map ID	Critical Facility	Bldg Value	Tsunami Inundation Area
1	Pioneer Street Water Tank and Equipment	$8,500,000	Outside Tsunami Inundation Area
2	Wastewater Treatment Plant	$28,000,000	Outside Tsunami Inundation Area
3	McKenzie Junior High School	$28,500,000	Outside Tsunami Inundation Area
4	Obispo Street Water Tank and Equipment	$7,000,000	Outside Tsunami Inundation Area
5	Mary Buren Elementary School	$35,200,000	Outside Tsunami Inundation Area
6	City Hall	$20,000,000	Outside Tsunami Inundation Area
7	Guadalupe Senior Citizen Center	$3,500,000	Outside Tsunami Inundation Area
8	Tenth Street Water Tank and Equipment	$7,000,000	Outside Tsunami Inundation Area
9	Fire Station #1 and Veterans Memorial Building	$15,000,000	Outside Tsunami Inundation Area
10	Boys and Girls Club	$2,500,000	Outside Tsunami Inundation Area
11	LaGuardia St. Sewer Lift Station	$7,000,000	Outside Tsunami Inundation Area
12	Pioneer St. Sewer Lift Station	$7,000,000	Outside Tsunami Inundation Area
	Exposure	**$169,200,000**	**$0**

The Tsunami vulnerability it limited due to the distance and elevation change from the ocean to the city limits. The only possibility is a surge up the Santa Maria River canal which has some remote potential of creating a hazard.



Source: Tsunami Run-up Limits, Santa Barbara County GIS

Qualitative Estimate of Impacts Analysis

12.5.5 Agricultural Pests and Disease

As mentioned earlier a significant agricultural pest or disease event will have an impact on the environment and the local economy. However, virtually all of the farming is conducted in the unincorporated county area surrounding the City of Guadalupe. Crops are currently brought into the city for cooling, packing and distribution. Those crop values are not available.

12.5.6 Train Accident

In the unlikely event of a significant train accident there could be considerable impact on the population, economy, and the environment.

Trains running through Guadalupe, and in close proximity to U.S. Highway 101 in some areas, carry commuters and all other types of commodities including hazardous materials, fuel (including oil), agriculture, meats, and non-consumables. A hazardous material incident on rails or roadway has the potential to shut down both rail and street transportation routes where the rail line and streets are in close proximity.

12.6 MITIGATION STRATEGY

In preparation of the 2016 update of this plan, the City's Local Planning Team reviewed the Mitigation Priorities and validated them for relevance. Additionally, the City made minor recommendations to the County-wide goals and objectives to better reflect the needs for the City. This section contains the City's updated and most current mitigation strategy as of October 2016.

12.6.1 Mitigation Priorities

General Observations — Strengths

- Several policies exist that have hazard mitigation elements or effects such as development and building code regulations, the Retrofit Ordinance, the Zoning Ordinance, the General Plan, and other codes and plans discussed in more detail in this section
- A General Plan is in place and will help steer future growth of the City
- Existing codes will ensure that new development (including tear down and rebuild projects) will be built to modern standards. With the current trend of replacing existing substandard buildings with new ones, and through attrition, a safer community will be constructed
- Housing improvement funds and programs are limited, impacting the opportunity to build a safer community
- Better mapping of floodplains and other hazard areas are available for emergency

management

- The Wetlands Lake is under review to find resources to mitigate future flooding
- All flooding areas have been mapped
- All high hazardous substance inventories have been documented by the County of Santa Barbara
- Existing Code Compliance Program includes the inspection of all vacant properties at least once per year, and the property owners are required to maintain their properties clean and the vegetation cut
- A building to house the fire engines and public works vehicles was proposed previously, and the project is still under consideration, dependent upon available funding. A public works building should be completed by the end of this fiscal year. Fire truck locations are at the American Legion building and City Hall which are both considered at risk
- The City has identified 21 buildings within the city limits that are un-reinforced masonry construction (URM), two of which are city-owned. In 2007, the City Redevelopment Agency (RDA) allocated approximately $3 million in RDA funds in the form of grants to assist owners of URM buildings in retrofitting their building to seismic safe standards. At this time, the owners of 19 of the 21 buildings have participated in the URM Retrofit Grant Program and the retrofitting is complete. That retrofit funding opportunity has expired and the two remaining URM building are not open to the public.

General Observations — Weaknesses

- The City is prone to flooding during heavy rain storms, and the lack of a levee structure between the Santa Maria River and along the northern boundary of the City. Flooding has occurred requiring a Local Emergency Proclamation on several occasions.
- The City of Guadalupe is located in Seismic Zone 4, which is the highest potential status for earthquake activity in the state of California. All but two of the identified unreinforced masonry buildings have been upgraded. The remaining buildings will likely wait for grant funding.
- Because the City of Guadalupe is located next to the Santa Maria River down-stream of the Twitchell Dam, the City could sustain substantial flooding in the event of a dam failure.
- Hazardous materials storage, transportation and use within the City poses an ongoing risk to the community.
- Evacuation remains an issue, particularly as the City continues to grow. A more efficient and diverse means of notification to community residents of the need for evacuation or shelter-in- place due to local emergencies is currently in need of updating. However the county has implemented a reverse 911system which will assist in making emergency notifications.
- The goals and objectives were developed by considering the risk assessment findings, localized hazard identification and loss/exposure estimates, and an analysis of the

jurisdiction's current capabilities assessment. These preliminary goals, objectives and actions were developed to represent a vision of long-term hazard reduction or enhancement of capabilities.

Goals and Objectives

The City of Guadalupe modified the goals and objectives as determined by the County-wide Mitigation Advisory Committee to meet the specific needs of the City. These goals and objectives represent a vision of long-term hazard reduction or enhancement of capabilities.

Goal 1: Promote disaster-resistant future development.
Objective 1.A: Facilitate the development or updating of the General Plan. Update the General Plan and zoning ordinances as needed to limit (or ensure safe) development in hazard areas.
Objective 1.B: Facilitate the adoption of building codes and development regulations that protect existing assets and require disaster resistant design for new development in hazard areas.
Objective 1.C: Facilitate consistent enforcement of the General Plan, zoning ordinances, and building and fire codes
Objective 1.D: Address identified data limitations regarding the lack of information about new development and build-out potential in high hazard areas.
Objective 1.E: Educate the professional community on design and construction techniques that will minimize damage from the identified hazards
Notes: This goal focuses on the programmatic/policy approaches to reducing risk to future new development. Building codes are updated on a regular basis in California. The objectives for this goal are ongoing to ensure that the best and most recent building and fire codes are adopted in each of the participating jurisdictions. New fire codes are currently under proposed adoption for 2016.

Goal 2: Build and support capacity and commitment for existing assets, including people, critical facilities/infrastructure, and public
Objective 2.A: Increase awareness and knowledge of hazard mitigation principles and practice among local government officials.
Objective 2.B: Provide technical assistance to local governments to implement their mitigation plans.
Objective 2.C: Address data limitations identified in Hazard Profiling and Risk Assessment
Objective 2.D: Decrease the vulnerability of public infrastructure including facilities, roadways, and utilities.
Objective 2.E: Protect existing structures with the highest relative vulnerability to the effects of identified hazards through structural mitigation projects.
Notes: This goal focuses on the programmatic and structural approaches to reducing risk to existing development. The term "local government" is used to refer to city, county, and special districts.
Goal 3: Enhance hazard mitigation coordination and communication.
Objective 3.A: Educate the public to increase awareness of hazards, potential impact, and opportunities for mitigation actions.
Objective 3.B: Monitor and publicize the effectiveness of mitigation actions implemented countywide.
Objective 3.C: Participate in initiatives that have mutual hazard mitigation benefits for the County, Cities, State, Tribal, and Federal governments.
Objective 3.D: Encourage other organizations, within the public, private, and non- profit sectors, to incorporate hazard mitigation activities into their existing programs and plans.
Objective 3.E: Continue partnerships between the state, local, and tribal governments to identify, prioritize, and implement mitigation actions.

Objective 3.F: Continuously improve the City's capability and efficiency at administering pre- and post-disaster mitigation programs.
Objective 3.G: Support a coordinated permitting activities process and consistent enforcement.
Note: This goal focuses on communication and coordination required for successful mitigation of risk.

12.6.2 Mitigation Progress

This section lists the previous projects and action status 2011.

Mitigation Actions From 2011			
Action #	**Mitigation Action Description**	**Status**	**Prioritization***
2011-1	Community Emergency Response Team (CERT) Training	No Action	Medium
2011-2	Develop the previously proposed combination Public Works and Fire facility, and upgrade the facility design to serve as a fire station to accommodate existing and future staffing.	In progress	Medium
2011-3	Disaster Early Warning System and Evacuation Plan	Completed . Reverse	High
2011-4	Prepare Drainage Study and Master Plan	Deferred & revised	Low
2011-5	Earthquake retrofit program for Unreinforced Masonry Buildings.	In progress	High
2011-6	Mitigation of Repetitive Flooding	In progress	High

12.6.3 Mitigation Approach 2016

Mitigation Actions for Future Implementation	
Action #	**Mitigation Action Description**
2016-1	Community Emergency Response Team (CERT) Training
2016-2	Design and obtain cost estimates for the previously proposed Public Safety facility, and upgrade the facility design to serve as a fire and police station to accommodate existing and future staffing.
2016-3	Disaster Early Warning System and Evacuation Plan
2016-4	Prepare Drainage Study and Master Plan

2016-5	Earthquake retrofit program for Unreinforced Masonry Buildings. Post required warning signs and research legal options.		
2016-6	Mitigation of Repetitive Flooding		
2016-7	Improve storm water drainage along Highway 166 and Main Street to the western city limit	New	High

*Discussion of the rationale for these priorities is included in the implementation plan status reports following this page.

12.6.4 Implementation Plan

Mitigation Action # 2016 – 1		
Project Description: Community Emergency Response Team (CERT) Training Work with the City of Santa Maria, Allan Hancock College and the private foundations to schedule CERT training courses for Guadalupe residents. Advertise the training courses on the City's government access channel, Facebook and in the Santa Maria Times. Coordinate with Senior Citizens groups, downtown merchants, and property owners to ensure they are notified of training courses. Conduct training courses twice a year at different times and locations. CERT is a positive and realistic approach to emergency and disaster situations where citizens may initially be on their own and their actions can make a difference. While people will respond to others in need without the training, one goal of the CERT program is to help them do so effectively and efficiently without placing themselves in unnecessary danger. In the CERT training, citizens learn to manage utilities and put out small fires, treat the three medical killers by opening airways, controlling bleeding, and treating for shock, provide basic medical aid, search for and rescue victims safely, organize themselves and spontaneous volunteers to be effective, and collect disaster intelligence to support first responder efforts.		
Applicable Hazards		
Significant ☒Flooding (Rain Storms) ☒Earthquake	Moderate ☒Train Derailment ☒Hazardous Materials Release ☒Agriculture (pests and disease)	Limited ☒Flooding (Dam/Levee Failure) ☒Tsunami
Existing and Potential Resources: General Fund, State Grants, Private Grants, Santa Barbara County funding.		
Responsible Department: City of Guadalupe Fire Department,		
Target Completion Date: Ongoing.		
Cost Benefit Consideration: Cost Beneficial - The relatively low cost of instituting CERT training and other education programs should easily be offset by damages avoided if only a portion of the community participates in training.		
Status Report: This is a Medium priority as we have limited staff available to present the program on a regular basis. With our partnership in the City of Santa Maria, we have an instructor, but he is being shared between three organizations.		

Mitigation Action # 2016 – 2

Project Description: Develop the previously proposed combination Public Safety facility, and upgrade the facility design to serve to accommodate existing and future staffing. The Public Works Component has been met with existing plans and currently available funds.

Applicable Hazards

Significant	Moderate	Limited
☒Flooding (Rain Storms)	☒Train Derailment	☒Flooding (Dam/Levee Failure)
☒Earthquake	☒Hazardous Materials Release	☒Tsunami
	☐ Agriculture (pests and disease)	

Existing and Potential Resources: General Fund, special revenue funds, State Grants, Federal Grants, Santa Barbara County funding, Private Grants.

Responsible Department: City Fire Department and Police Department, and FEMA pre disaster mitigation grants.

Target Completion Date: 4 to 9 years

Cost Benefit Consideration:

Highly Cost Beneficial. This facility would provide a new location for Public Safety personnel and equipment and provide a new and safer facility for the Fire and Police operations.

Status Report: This is a Medium priority as we will need to identify funding to modify the existing plans to expand the scope of the project. There is currently no funding identified and no real prospect for funding in the near future for this project. An estimate for the project is approximately $7 million.

Mitigation Action # 2016 – 3

Project Description: Disaster Early Warning System and Evacuation Plan in the event of a major earthquake, levee failure, train derailment, or hazardous materials leak.

Explore strategies to develop an early warning/public emergency notification system. Finish development of a comprehensive evacuation plan. Better develop Reverse 911 and Everbridge resources and update policies accordingly.

Applicable Hazards

Significant	Moderate	Limited
☒Earthquake	☒Train Derailment	☐ Tsunami
☒Flooding (Rain Storms)	☒Hazardous Materials Release	☒Flooding (Dam/Levee Failure)
	☒Agriculture (pests and disease)	

Existing and Potential Resources: General Fund, FEMA Grant, Brownfield Act, Federal Grants, State Grants, and Private Grants.

Responsible Department: Fire Department, supported by; Planning Department, Police Department, Public Works Department, City Administrator, and OES Coordinator.

Target Completion Date: 2 years

Cost Benefit Consideration:

Highly Cost Beneficial – The cost of developing an early warning and evacuation plan would easily be offset by the reduction in injuries and potential loss of life if residents were not immediately informed of a disaster and if no evacuation plan were in place. A disaster early warning plan could includes the Santa Barbara County Sheriff's Department to prepare a database of all phone numbers in Guadalupe, both residential and commercial so that a Reverse 911® system could be used in the event of an emergency, including the voluntary registration of cell phone numbers into the Reverse 911® System database. The acquiring of a general community warning system such as a siren or public address system could prove to be very costly and is currently beyond the capability of the City's General Fund. While this type of system is beneficial, it does come with a significant amount of labor-intensive public education. Fully embrace and train in the Everbridge program and update operational policies to include these added communications systems.

Status Report: This is a High priority as there have been several threats to the community identified in this plan which would clearly benefit from the warning system. The threats to the community identified and that would be of benefit from the acquisition of this type of system could be categorized as "Low Occurrence, High Consequence." A potential funding source has been identified which makes it very viable.

Mitigation Action # 2016 – 4

Project Description: Prepare Drainage Study and Master Plan

Prepare a Drainage Study and Master Plan for the City that would identify drainage strengths and weaknesses in the City and surrounding areas. The study would show potential vulnerabilities and potential mitigation measures. Preparation of a Drainage Master Plan would identify existing facilities and potential upgrades and provide the Planning Commission and the City Council with usable guidelines pertaining to drainage prior to granting new project approval. A Drainage Master Plan would also identify potential drainage vulnerabilities and suggest mitigation measures.

Applicable Hazards

Significant	Moderate	Limited
☒Flooding (Rain Storms)	☒Train Derailment	☒Flooding (Dam/Levee Failure)
☐ Earthquake	☒Hazardous Materials Release	☐ Tsunami
	☒Agriculture (pests and disease)	

Existing and Potential Resources: General Fund, FEMA Grant, CREF, Recreational, Duneship trails to beach, County Levee and bike path funding.

Responsible Department: City Engineer, Public Works, County Flood Control, and Flood Consultant.

Target Completion Date: 5 years

Cost Benefit Consideration:

Cost Beneficial – This strategy can be cost beneficial. Extreme flooding and erosion can cause huge losses and create safety hazards for residents and transient visitors. Preparation of a Drainage Study and Master Plan would identify potential vulnerabilities and subsequently implementing mitigation measures can be expected to produce benefits significantly higher than the cost of a Drainage Study. Erosion of levee which serves as future bike path. Erosion of floodplain leading to dunes which serves as future trail to beach. Wetlands preservation and development of recreational walkways, riding trails and educational nature continuum to dunes, beach and levee.

Status Report: This is a low priority as there is no funding available for this planning process, and even less funding available to implement the results of the planning process. We will continue to monitor the marketplace for funding, and once identified, we will pursue the funding.

Mitigation Action # 2016 – 5

Project Description: Earthquake retrofit program for Unreinforced Masonry Buildings.

Notify the two remaining URM building owners and tenants that after the deadline, all URM buildings that are not in compliance will have to be vacated and will be posted as unsafe. Legal research will be necessary before taking additional action.

Applicable Hazards

Significant	Moderate	Limited
☐ Flooding (Rain Storms)	☐ Train Derailment	☒ Flooding (Dam/Levee Failure)
☒ Earthquake	☐ Hazardous Materials Release	☐ Tsunami
	☐ Agriculture (pests and disease)	

Existing and Potential Resources: Follow up work will be financed by City General Fund using existing Staff. Funding for URM building retrofits after December 31, 2010 will be from private sources acquired by the building owners.

Responsible Department: Fire Department and Building Department with support from: Planning Department, Engineering Department, Police Department, Public Works Department, City Administrator, City Council, Contract City Attorney, unreinforced masonry building owners, and local business merchants.

Target Completion Date: January 30, 2019

Cost Benefit Consideration:

Highly Cost Beneficial: The City committed approximately $3 million in Redevelopment Agency funds in the form of grants to assist URM building owners with seismic retrofitting of their buildings. The State of California had established a deadline of December 31, 2012 for completion of the seismic retrofitting of URM buildings. The City has an obligation to its residents and visitors to ensure that those URM buildings that are not retrofitted are posted "Unsafe to Occupy" and their continued use prohibited both for their safety and to comply with State Law. Follow up through legal actions as appropriate using the services of the Contract City Attorney may also be necessary.

Status Report: This is a High priority as the entire downtown core of the City consists of URM buildings. While the City Redevelopment Agency has provided grant funding to assist the property owners in getting the retrofitting completed, the need to ensure the retrofitting of the URM buildings is brought to closure is vital to the economic survival of our community.

Mitigation Action # 2016 – 6

Project Description: Mitigation of Repetitive Flooding of the 800-900 blocks of Pioneer Street and the LeRoy Park area, and protection of the northwest portion of the City from flooding.

Working with Federal, State and Local officials, along with the private property owners of the affected areas, develop and implement a plan to extend the Santa Maria River Levee west from the Highway 1 bridge (where it currently terminates) to at least the western city limits. As an alternative, continue the extension of the levee to include the Guadalupe Dunes County Park to protect the access to the beach.

Develop alternatives to the construction of the levee extension as a temporary alternative until the levee extension project can be accomplished.

Applicable Hazards

Significant	Moderate	Limited
☒ Flooding (Rain Storms)	☐ Train Derailment	☒ Flooding (Dam/Levee Failure)
☐ Earthquake	☐ Hazardous Materials Release	☐ Tsunami
	☐ Agriculture (pests and disease)	

Existing and Potential Resources. There are no specific funding sources identified that are available at this time. Potential sources for funding could include, Federal Grants, FEMA Disaster Mitigation Funds, State Grants and Disaster Mitigation Funds, County Disaster Mitigation Funds, Private Grants, and other Federal funding allocations.

Responsible Department: City Administrator, with support from Federal, State, and Local entities.

Target Completion Date: December 31, 2021

Cost Benefit Consideration:

Highly Cost Beneficial: The City has incurred several disaster declarations due to flooding from the Santa Maria River and the lack of a protective levee structure along the City's northern border, west of Highway 1. The City's wastewater treatment plant is very vulnerable to inundation from the river flow, and damage to that facility would be catastrophic to the community. In addition, the recent storm damage to the access road to the Guadalupe Dunes County Park has virtually eliminated vehicle access to the parking area for the park, and has significantly reduced the number of visitors to the beach, as they must now walk nearly one mile from the temporary parking area to the beach. This reduction in visitors has adversely affected the City's sales tax associated with patronization of the local stores and restaurants.

Status Report: This is a High priority as the City has experienced repeated losses in the 800 block of Pioneer Street due to flooding from storms. This area is in desperate need of both immediate (temporary) and permanent (long-term) solutions to the flooding problems. The ideal solution would be the extension of the Santa Maria River Levee west from its current terminus at the Highway 1

bridge, to the western City limits. However, that process will be very protracted and expensive as there are numerous Federal, State and Local entities that must be involved and approve the project. Even a short-term solution such as a pilot channel in the river to move the flow of the river to the north side of the riverbed requires extensive review and permitting from numerous Federal, State and local entities. In addition to the onerous permitting process, any solution, temporary or permanent is going to involve tens of millions, if not hundreds of millions of dollars to bring to fruition. That funding is not currently available, and in this current economy, it is unlikely to become available any time soon.

Mitigation Action # 2016 – 7		
Project Description: Improve drainage along Highway 166 and continuing along Main Street in Guadalupe to the western city limit. Improve and expand capacity of drainage along Highway to mitigate chronic flooding along the highway and Main Street, which is an extension of Highway 166.		
Applicable Hazards		
Significant	Moderate	Limited
☒ Flooding (Rain Storms) Earthquake	Train Derailment Hazardous Materials Release ☒ Agriculture (Chemical run off)	☒ Flooding (Dam/Levee Failure) Tsunami
Existing and Potential Resources: Follow up work should be financed by CalTrans, Measure A funds, or other alternative grant funding source.		
Responsible Department: Public Utilities Department, Planning Department, Engineering Department, City Administrator, City Council, Contract City Attorney, and CalTrans.		
Target Completion Date: January 30, 2019		
Cost Benefit Consideration: Moderately Cost Beneficial: CalTrans completed a highway shoulder expansion and improved storm drain runoff within the past two years. The improvements eased and increased the flow of water along the highway until reaching the City of Guadalupe, where construction halted. This improved flow and capacity resulted in a higher run off volume which dumped in the storm drain through the City which had not been improved. The solution through the unincorporated area created a chronic flooding problem within Guadalupe in storm drains that were not designed to carry the increased level of flow. The result is a overflowing drains, plugged under passes and water and an unsafe quantity of water and debris through the City of Guadalupe.		
Status Report: This is a High priority as the exclusive access to the housing developments west of Pioneer has only one route of escape during a flood which is through areas of flooding. This is a recently identified risk which was created upstream by the improvements of others without mitigating the impact as the water flows toward the ocean. A peripheral concern is in the agricultural chemical runoff which travels without obstruction into the City.		

12.7 PRIOR PLAN ACTIVITY

The previous plan mitigation progress demonstrated some room for improvement. While some progress was attained in mitigation of the earthquake risks, most of the remaining actions were left incomplete. Several factors weighed heavily into this shortfall of progress,

the great recession eliminating the Redevelopment Agency and its funding, a critical financial shortfall and the loss of the Fire Chief. The duties of the fire service are now managed by the Police Chief who serves the City as the Director of Public Safety.

The recession heavily struck the City of Guadalupe with a loss of grant funding which had aided in repair and maintenance of the community, particularly in its infrastructure. Other financial losses brought the community to the brink of dis-incorporation, saved only by the voter approval of three separate tax measures.

With the loss of the RDA, along went rental income for some of the businesses as well as redevelopment aid. Virtually all earthquake mitigation came to a halt due to a lack of funds. Fortunately, the majority of unreinforced masonry building had undergone seismic upgrades prior to the collapse of the RDA.

Still relating to a financial shortfall, the Fire Chief position was eliminated during the previous action cycle losing a designated driver for the projects. The duties of the Fire Chief were absorbed by the Police Chief under a renamed title the Director of Public Safety. While the salary saving assisted in retaining cityhood, there was an insufficient support system to properly manage the all of the tasks incumbent upon both departments. Operationally, the move felt much less impact. But the associated responsibilities suffered.

With that said, the CERT team was attempted without sufficient volunteers to proceed (2011-1.) At this point, a successful Neighborhood Watch program has been completed laying the foundation for a public safety minded volunteer force interested in CERT Training.

No progress was attained on the design of a combined public works and fire station (2011- However, the public works has been funded for a workshop construction during FY 2016/2017. This allows the public works component to operate independently and paves the way for a revised objective of a consolidated public safety facility housing the police and fire operations.

The disaster Early Warning System was completed through the county implementation of a reverse 911 system (2011-3.) This basic system provides an improved communication

during emergency systems to notify the community of the threats and recommended actions.

Mitigation activity relating to the preparation of a drainage and study and master plan was largely deferred (2011-4.) Some drainage improvements were accomplished based on necessity when dealing with excessive storm water runoff created by the State Highway storm water enhancement increasing water flow along Highway 166 draining into the unimproved city drainage system. Aside from the State ceasing to continue improvement in water flow upon reaching the Guadalupe City Limits, there remained a shortfall of funding to properly address this objective.

Seismic upgrades to mitigate the risk of unreinforced masonry buildings has nearly been completed. There are only two remaining buildings without the upgrades, neither of which are open to the public. One has recently changed ownership and reuse plans are underway, mandating an upgrade for use. The other building is owned by the city and will await available Community Development Block Grant Funds or other source before proceeding. Other options for the structure have been discussed but there is not a plan for moving forward, as of this writing.

One area of repetitive flooding remains unaddressed due to the abandonment of the levy rehabilitation project to extend to the west providing protection of City assets (2011-6.) This issue has met with recognition by the County as a potential candidate for mitigation.

12.8 PLAN MAINTENANCE

The City of Guadalupe will be responsible for ensuring that this annex is monitored on an on-going basis. The City will continue to participate in the countywide Mitigation Advisory Committee and attend the annual meeting organized by the County Office of Emergency Management to discuss items to be updated/added in future revisions of this plan.

Major disasters affecting the City of Guadalupe's community, legal changes, notices from Santa Barbara County (lead agency for the County-wide Plan), and other significant events may trigger revisions to this plan or a convening of the Local Planning Team. The City of Guadalupe local planning team, in collaboration with the Santa Barbara County Office of Emergency Management, and the other communities of the County, will determine how often and when the plan should be updated. In order to remain eligible for mitigation grant funding

from FEMA, the City is committed to revising the plan at a minimum of every five years.

The City's Director of Public Safety or other designee will contact the county four years after this plan is approved to ensure that the county plans to undertake the plan update process. The jurisdictions within Santa Barbara County should continue to work together on updating this multi-jurisdictional plan.

The public will continue to be involved whenever the plan is updated and as appropriate during the monitoring and evaluation process. Prior to adoption of updates, the City will provide the opportunity for the public to comment on the updates. A public notice will be published prior to the meeting to announce the comment period and meeting logistics. Moreover, the City will engage stakeholders in community emergency planning.

Comments or suggestions regarding this plan may be submitted at any time to Gary L. Hoving, Director of Public Safety, 918 Obispo Street, (P.O. Box 908,) Guadalupe, CA 93434.

Contact information: ghoving@ci.guadalupe.ca.us, 805-343-2112