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# QUESTHAVEN CONCEPTUAL WILDFIRE EVACUATION PLAN

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Prepared for:

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### 1 QUICK REFERENCE – CONCEPTUAL WILDFIRE EVACUATION PLAN

**NOTE:** Pages 1 through 16 are the focus of the educational outreach efforts to Questhaven residents and guests. These pages will be provided to each homeowner at the change of property ownership by recording them against property titles, and available on the HOA Website. The remainder of this Conceptual Wildfire Evacuation Plan (CWEP) provides more detailed analysis and background information intended for review by emergency management agencies, including this plan's consistency with Rancho Santa Fe Fire Protection District (RSFFPD) Evacuation Plans and standard San Diego County Office of Emergency Services evacuation planning.

This plan also provides a list of recommended measures to be implemented at the Questhaven Project to augment the ability of first responders to protect residents and travelers during an emergency.

Figure 1 illustrates the emergency evacuation routes potentially available to Questhaven (Project). Figure 2 displays the Project's vicinity location and Figure 3 is the Project's site plan.

The Project's evacuation routes, potential wildfire exposure, and contingency refuge areas along evacuation routes for residents and guests are detailed below and in Figure 1. Visitors should know available routes, stay informed, and follow directions provided by law enforcement or fire agencies, news media, and other credible sources. Do not rely on navigation apps that may inadvertently lead persons toward the approaching wildfire.

#### 1. Egress to the west via San Elijo Road and South Rancho Santa Fe Road.

South Rancho Santa Fe Road offers a potentially available alternative with access to SR-78. Traveling west on San Elijo Road towards Rancho Santa Fe Road (approximately 1 mile), then heading north on Rancho Santa Fe Road (approximately 4 miles) enables evacuees to travel east to I-15 or west to I-5, which allows travel north or south on I-15.

- a. Wildland Fire Exposure Rating: Low. Exposure along San Elijo Road west and S Rancho Santa Fe north consists of urban neighborhoods, institutional and commercial developments, all of which include maintained landscape. Exposure along San Elijo Road and S Rancho Santa Fe Road is predominantly low, with residential, institutional and commercial properties. Potential exposure to wildfire is low.
- b. **Potential Temporary Roadside Refuge:** There are several shopping centers along S Rancho Santa Fe Road between San Elijo Road and SR-78, as well as San Marcos

High School at the intersection on Rancho Santa Fe Road and W San Marco Boulevard.

#### 2. Egress to the south via San Elijo Road and Rancho Santa Fe Road

South Rancho Santa Fe Road also provides an option to travel south toward I-5. Traveling west on San Elijo Road towards Rancho Santa Fe Road (approximately 1 mile), then heading south on Rancho Santa Fe Road (approximately 7.5 miles) enables evacuees to access I-5, which allows travel north or south.

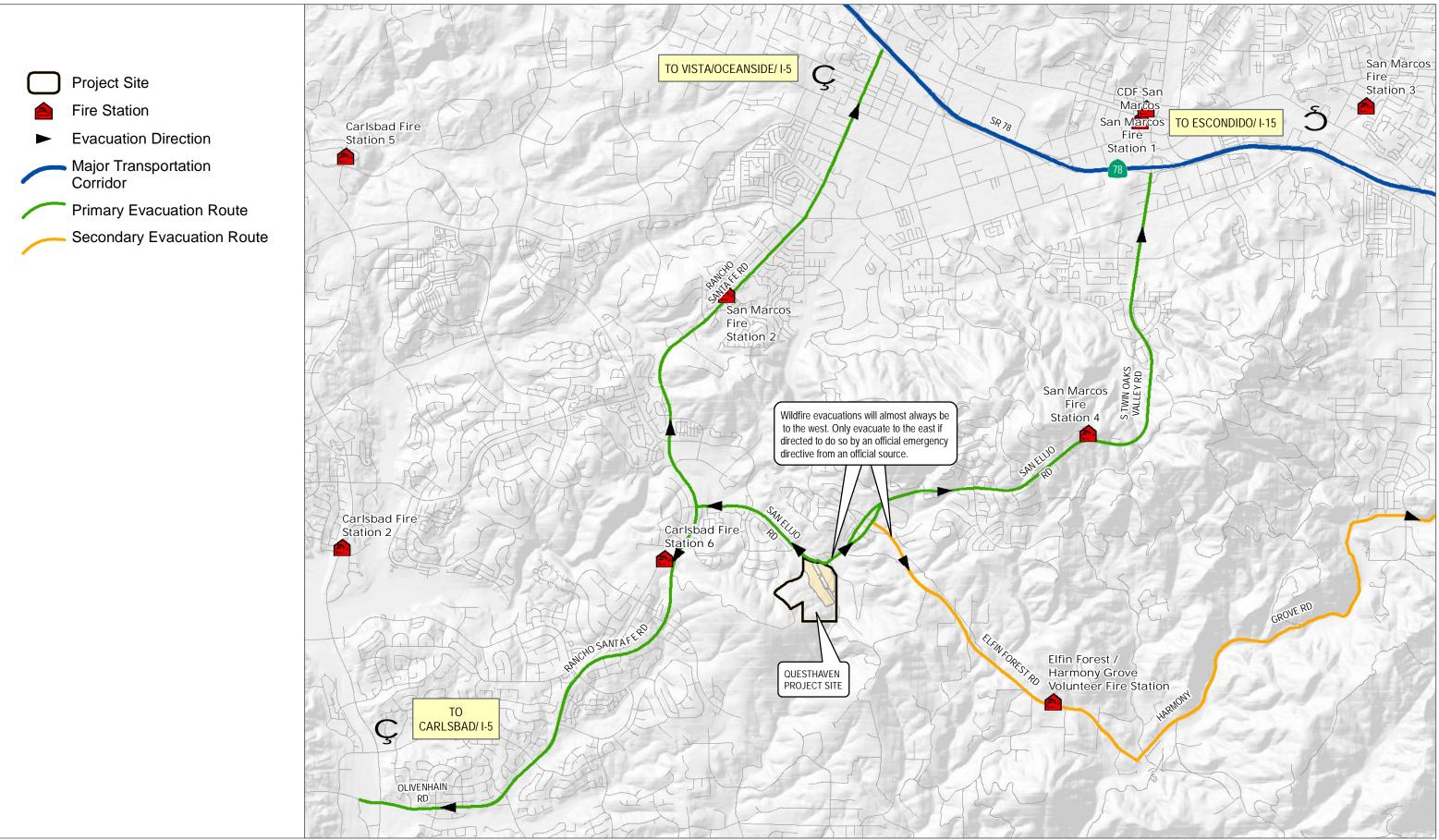
- a. Wildland Fire Exposure Rating: Low. Exposure along San Elijo Road west and S Rancho Santa Fe south consist of urban neighborhoods, institutional and commercial developments, all of which include maintained landscape. Exposure along San Elijo Road and S Rancho Santa Fe Road south is predominantly low, with residential, institutional and commercial properties. Potential exposure to wildfire is low.
- b. **Potential Temporary Roadside Refuge:** There are several shopping centers along S Rancho Santa Fe Road between San Elijo Road and I-5, as well as Mission Estancia School at the intersection on Rancho Santa Fe Road and Calle Barcelona.

#### 3. Egress east via San Elijo Road and South Twin Oaks Valley Road

San Elijo Road is the primary Project access (ingress and egress) road and the primary evacuation route. Traveling east on San Elijo Road, continuing on S Twin Oaks Valley Road, towards SR-78 (approximately 4.75 miles) enables evacuees to travel east to I-15 or west to I-5, which allows travel north or south on I-15.

- a. **Wildland Fire Exposure Rating: Moderate.** Exposure along San Elijo Road east includes unmaintained open space and maintained landscape within residential neighborhoods. Potential exposure to wildfire is considered moderate.
- b. **Potential Temporary Roadside Refuge(s):** San Elijo Middle School, San Elijo Elementary School or Double Peak School, located approximately 1 mile, 1 mile, and 3 miles, respectively, east of the Project on San Elijo Road.

One or more of these evacuation routes may be available to the Project's residents and visitors during a wildfire evacuation. Short notice events, where a fire ignites close to the area may affect evacuation route availability. Each potentially available evacuation route includes varying degrees of potential exposure to wildland fire and therefore, varying likelihood that it may or may not be available in a short-notice evacuation, as noted above. In the event that one or more roads are not considered safe for evacuation, contingency options, including temporary refuge options, will be available to the Project.



SOURCE: BASEMAP-ESRI & SANGIS, 2017

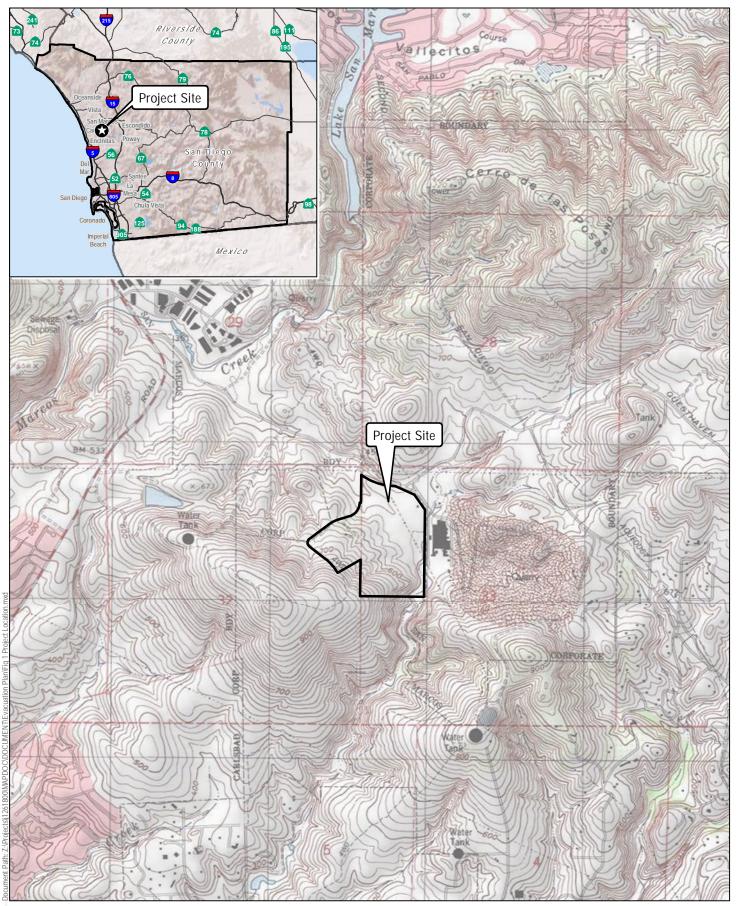
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FIGURE 1 The Questhaven Community Fire Evacuation Map Evacuation Plan for the Questhaven Project

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SOURCE: USGS 7.5 MINUTE SERIES, RANCHO SANTA FE QUADRANGLE TOWNSHIP 12 SOUTH, RANGE 3 WEST, SECTIONS 32 AND 33

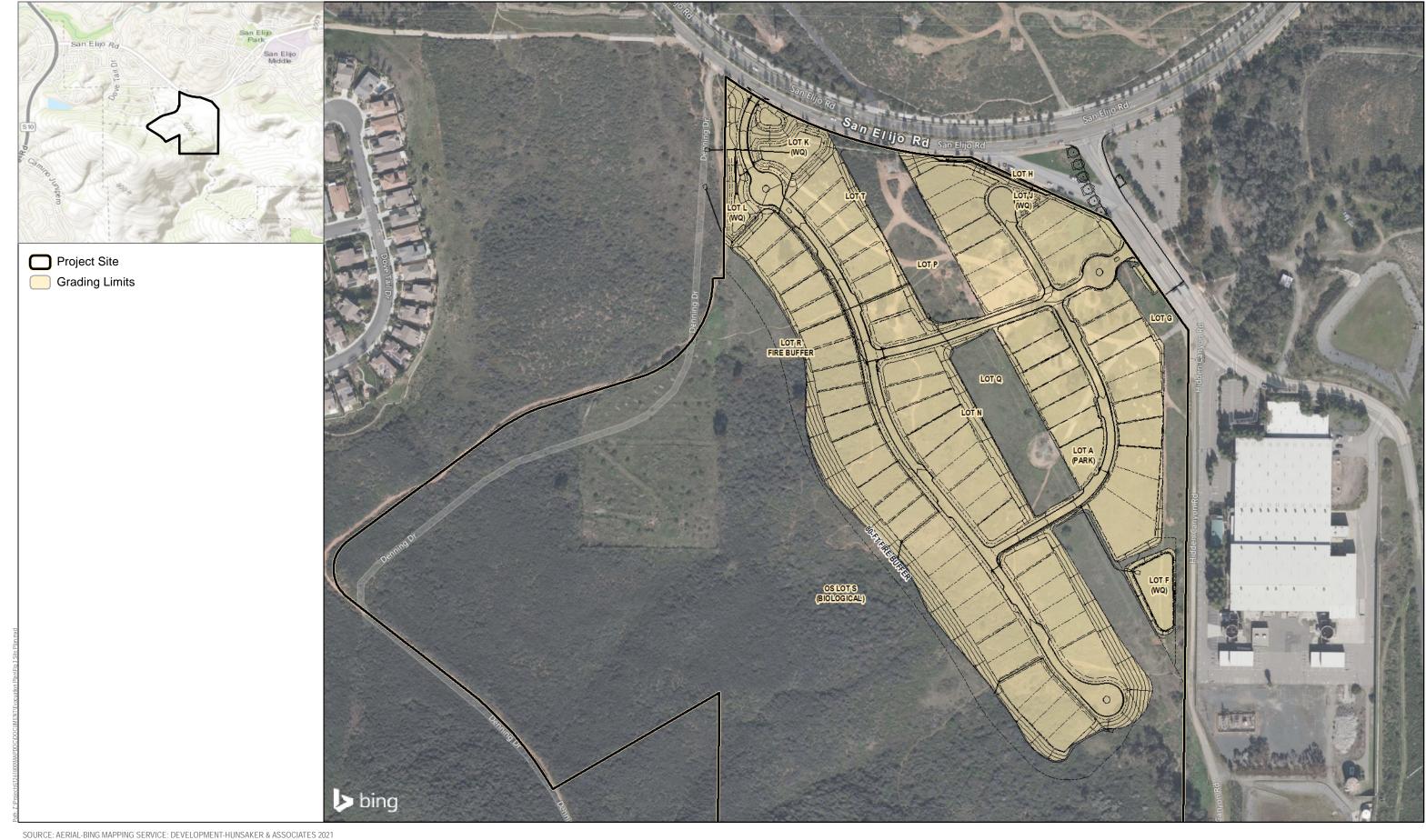
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Figure 2 Project Location Evacuation Plan for the Questhaven Project

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500 Feet

FIGURE 3 Site Plan Evacuation Plan for the Questhaven Project

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12618 April 2021 It must be recognized that wildfire and other emergencies are often fluid events and that the need for evacuations are typically determined by on-scene first responders or by a collaboration between first responders and designated emergency response teams, including Office of Emergency Services and the Incident Command established for larger emergency events. As such, and consistent with all emergency evacuation plans, this CWEP is to be considered a tool that supports existing pre-plans and provides for citizens who are familiar with the evacuation protocol, but is subservient to emergency event-specific directives provided by agencies managing the event.

### 1.1 Nearest Medical Facilities

#### Palomar Hospital (8.5 miles) (Palomar is a Level-1 Trauma Center)

2185 Citracado Parkway Escondido, California 92029

#### Directions:

- Drive northeast on San Elijo Road (2.6 miles)
- Continue onto S Twin Oaks Valley Road (2.1 miles)
- Turn right to merge onto SR-78 East (2.4 miles)
- Take Nordahl Road exit
- Turn Left on Nordahl Road/Auto Park Way
- Continue onto Auto Park Way (0.6 miles)
- Turn Right onto Citracado Parkway (0.3 miles)
- Hospital located on Right

#### Scripps Memorial Hospital, Encinitas (8.5 miles)

354 Santa Fe Drive Encinitas, California 92024

#### Directions:

- Drive west on San Elijo Road (1.1 miles)
- Turn Left on Rancho Santa Fe Road (2.8 miles)
- Continue straight onto Olivenhain Road (0.9 miles)
- Continue onto Leucadia Boulevard (1.0 miles)

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- Turn Left onto Quail Gardens Drive (1.3 miles)
- Continue onto Westlake Street (0.3 miles)
- Turn Left onto Requeza Street (0.4 miles)
- Turn Left onto Devonshire Drive (0.4 miles)
- Turn Left in Hospital area
- Hospital is located to the Left

#### See also Local Urgent Care facilities, including:

Kaiser Permanente Urgent Care (4.6 miles) 400 Craven Road San Marcos, CA 92078Carlsbad Urgent Care 295 S Rancho Santa Fe Road San Marcos, CA 92078

### 1.2 Register to Receive Emergency Alerts

The County of San Diego utilizes a Reverse 911 system known as AlertSanDiego for its Emergency Notification System. AlertSanDiego is a countywide standard system that is managed as a regional asset by the County of San Diego Office of Emergency Services. In the event of a wildfire within the Project's proximity, the Incident Commander (IC) will contact the San Diego Sheriff Department (SDCSD) and other law enforcement agencies that may be needed to support an emergency situation (including San Diego County Sherriff's Department (SDCSD) and California Highway Patrol. The SDCSD's communications center has the responsibility to request activation of the AlertSanDiego system and release an emergency notification to the affected population. Therefore, the Project's staff are strongly advised to register their landlines, mobile phone numbers and email addresses with the Reverse 911, AlertSanDiego system (http://www.readysandiego.org /AlertSanDiego/) in order to receive emergency evacuation instructions.

#### 1.2.1 Notification Messaging

Effective initial communication to the public enhances the efficiency of the overall evacuation and reduces the associated evacuee mental and physical strains. The initial public notification provides basic information to residents including:

- Whether residents should evacuate or shelter-in-place
- The areas that need to be evacuated, with reference to known geographic features

- Why and when residents should evacuate
- The time required for evacuation efforts
- Where residents should evacuate to
- The designated transportation and evacuation points and evacuation routes
- Available transportation options
- Belongings residents should take with them from their homes
- How long the evacuation is expected to last (if known)
- How pets will be accommodated
- Security plans that are in place to protect residential property
- When informational updates will be made available, including where information updates can be found
- Other information deemed appropriate and required before residents evacuate, including information critical for individuals with disabilities and others with access and functional needs
- For people that will be relying on transportation assistance, it is important that they are informed about when transportation services will begin and end, transportation point collection locations, frequency of pick-ups, travel destinations (evacuation points), and what to bring with them.

The Project is part of the greater San Diego media market, and the media outlets will also be a good source of information via television and radio. Emergency situations are covered by media outlets and information is disseminated guiding appropriate response. In addition, the San Diego Emergency Alert System (EAS) is county -wide and broadcasts emergency information via two radio stations: KOGO AM 600 and KLSD AM 1360. The County of San Diego also provides visitors with wildfire and evacuation information by subscribing to the County e-alerts and Facebook and twitter pages http://www.sandiegocountyemergency.com). Additional news outlets include:

- Channel 10 News: 10news.com
- Channel 8 News: cbs8.com
- Channel 19 Cox Communications
- Channel 24 Time Warner Cable
- Channel 99 AT&T

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### 1.3 Get Involved in Readiness

The Questhaven Homeowner's Association (HOA) will organize a Neighborhood Emergency Response Team through the Community Emergency Response Team (CERT) program (https://www.rsf-fire.org/community-emergency-response-team-cert/). Residents will be encouraged to train and become certified for this volunteer community program. The CERT team will be an integral component of community safety, awareness, and response. The CERT team will work closely with the responding fire department's on-site personnel so that emergency response is practiced and familiar. In addition, the Questhaven HOA will organize annual evacuation public outreach, engage directly with organizations such as Fire Safe Council of San Diego County, as well as maintain a community Emergency Response page on the community webpage. The webpage will include this CWEP and links to important citizen preparedness information. This information will be made available to all Questhaven residents.

- This CWEP is prepared specifically for Questhaven and focuses on wildfire events that could require consideration of evacuation or temporary on-site refuge. Ultimately, this plan should be used to educate the Questhaven residents as to their evacuation options and raise awareness of evacuation approaches during wildfire. It is critical for Questhaven residents to understand the importance of being prepared, so if/when an evacuation is necessary, they will be familiar with the options that may be presented to them and they can implement their personal evacuation plan. Some actions community residents can perform in advance include: Follow the "Ready, Set, Go!" model developed for wildfire evacuations.
  - o Designate on-site staff as Fire Safety and Evacuation Coordinators
  - Familiarize themselves with the escape plan from the event structures, as well as familiarity with evacuation routes out of the area.
  - Monitor weather conditions on a daily basis, including during events

Sample emergency preparedness resources available to the Project's staff and visitors are provided in Appendix A ("Ready, Set, Go!" Wildland Fire Action Guide) and Appendices B through B4 (FEMA Business Disaster Planning Toolkits). In addition, Project management and staff are encouraged to become familiar with the concepts detailed at the following websites:

- 1. Emergency Information for San Diego County: sdcountyemergency.com
- 2. FEMA Business Emergency Planning Toolkits: https://www.fema.gov/medialibrary/resources-documents/collections/357
- 3. "Ready, Set, Go!" Wildland Fire Action Guide: https://www.sandiego.gov/sites/default/ files/rsg-english.pdf

4. Red Cross Emergency Planning:

http://www.redcross.org/get-help/how-to-prepare-for-emergencies/make-a-plan

### **1.4 Evacuation Plan Purpose and Limitations**

Wildfire and other emergencies are often fluid events and the need for evacuations are typically determined by on-scene first responders or by a collaboration between first responders and designated emergency response teams, including Office of Emergency Services and the Incident Command (IC) established for larger emergency events. As such, and consistent with all emergency evacuation plans, this Emergency Evacuation Plan is to be considered a tool that supports existing pre-plans and provides for citizens who are familiar with the evacuation protocol, but is subservient to emergency event-specific directives provided by agencies managing the event.

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### 2 BACKGROUND

This Conceptual Wildfire Evacuation Plan (CWEP) has been prepared based on the County of San Diego and Rancho Santa Fe Fire Protection District Emergency Operations Procedures, which closely follow the Unified San Diego County Emergency Services Organization and County of San Diego Operational Area Emergency Operations Plan (EOP), including its Evacuation Annex. This CWEP also provides Project specific evacuation planning, operations restrictions, and monitoring requirements.

To establish a framework for implementing well-coordinated evacuations, the County of San Diego Office of Emergency Services (OES) developed an Evacuation Annex Q as part of the Area EOP (San Diego County 2018). Large-scale evacuations are complex, multi-jurisdictional efforts that require coordination between many agencies and organizations. Emergency services and other public safety organizations play key roles in ensuring that an evacuation is effective, efficient, and safe. San Diego County OES is charged with emergency management and is responsible for maintaining situational awareness of threats that may necessitate a citizen evacuation. OES coordinates with cities during emergency events.

Evacuation is a process by which people are moved from a place where there is immediate or anticipated danger, to a safer place, and offered temporary shelter facilities. When the threat passes, evacuees are able to return to their normal activities, or to make suitable alternative arrangements.

Evacuation during a wildfire is not necessarily directed by the fire agency, except in specific areas where fire personnel may enact evacuations on scene. The San Diego County Sheriff Department, California Highway Patrol (CHP), and other cooperating law enforcement agencies have primary responsibility for evacuations. These agencies work closely within the Unified Incident Command System, with the County Office of Emergency Services, and responding fire department personnel who assess fire behavior and spread, which should ultimately guide evacuation decisions. To that end, SDCSD, San Diego Fire Rescue Department (SDFRD), San Diego County Fire Authority (SDCFA), San Diego County Public Works, Planning, Emergency Services Departments, and California Department of Transportation (Caltrans), amongst others, have worked as a part of a County Pre- Fire Mitigation Task Force to address wildland fire evacuation planning for San Diego County.

Every evacuation scenario will include some level of unique challenges, constraints, and fluid conditions that require interpretation, fast decision making, and alternatives. For example, one roadway incident that results in blockage of evacuating vehicles may require short-term or long- term changes to the evacuation process. Risk is considered highest when occurring during a short-notice evacuation and fire encroachment is imminent. This hypothetical scenario highlights the importance of continuing

to train responding agencies, model various scenarios, educate the public, and take a very conservative approach to evacuation decision timelines while providing contingency plans.

Equally important, the evacuation procedures should be regularly updated with lessons learned from actual evacuation events, as they were following the 2003, 2007, 2014, 2016, and 2017 San Diego County fires. The authors of this CWEP recommend that occasional updates are provided, especially following lessons learned from actual incidents; as new technologies become available that would aid in the evacuation process; and as changing landscapes and development patterns occur within and adjacent to the Project Area that may impact how evacuation is accomplished. At the time of this plan's preparation, there is no encompassing emergency evacuation plan available for the Project area. This CWEP is consistent with the County's evacuation planning standards and can be integrated into a regional evacuation plan and other pre-plans when and if the area officials and stakeholders (SDFRD/SDCFA, SDCSD, Cal Fire, OES, and others) complete one.

As demonstrated during large and localized evacuations occurring throughout San Diego County over the last 15 years, an important component to successful evacuation is early assessment of the situation and early notification via managed evacuation declarations. San Diego County utilizes early warning and informational programs to help meet these important factors. Among the methods available to citizens for emergency information are: radio, television, social media/internet, neighborhood patrol car public address notifications, and Reverse 9-1-1 or AlertSanDiego.

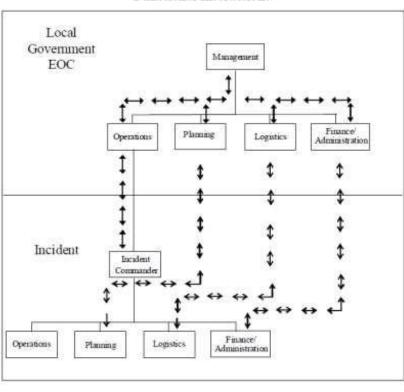
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### 3 SAN DIEGO COUNTY EVACUATION PLANNING SUMMARY

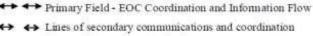
This CWEP incorporates concepts and protocols practiced throughout San Diego County. The San Diego County Evacuation Annex Q (2018) follows basic protocols set forth in the County's Operation Area Emergency Operations Plan and the California Master Mutual Aid Agreement, which dictate who is responsible for an evacuation effort and how regional resources will be requested and coordinated.

First responders are responsible for determining initial protective actions before EOCs and emergency management personnel have an opportunity to convene and gain situational awareness. Initial protective actions are shared/communicated to local EOCs and necessary support agencies as soon as possible to ensure an effective, coordinated evacuation. Figure 4 summarizes the functional interactions of local government EOC under the Incident Command System.

#### Figure 4 Incident Command System-Local Government EOC Functional Interactions



Incident Command System-Local Government EOC Functional Interactions



\_\_\_\_\_ Lines of Management Authority

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During an evacuation effort, the designated County Evacuation Coordinator is the SDCSD, who is also the Law Enforcement Coordinator. The Evacuation Coordinator will be assisted by other law enforcement and support agencies. Law enforcement agencies, highway/road/street departments, and public and private transportation providers will conduct evacuation operations. Procurement, regulation, and allocation of resources will be accomplished by those designated. Evacuation operations will be conducted by the following agencies:

- County of San Diego Sheriff's Department
- San Diego Fire Rescue Department
- San Diego County Fire Authority
- Rancho Santa Fe Fire Protection District
- Carlsbad Fire Department (sphere of influence)
- San Marcos Fire Department (sphere of influence)
- California Department of Forestry and Fire Protection (CAL FIRE)
- American Red Cross
- County Health and Human Services Agency
- San Diego Humane Society
- County Department of Animal Services,
- County Planning and Development Services
- County Department of Environmental Health
- County Department of General Services
- County Department of Public Works
- County Department of Agriculture, Weights, and Measures
- County Department of Parks and Recreation
- Other City, County, and state agencies, as needed

The following general information has been largely taken verbatim from the San Diego County Evacuation Annex:

### 3.1 Evacuation Objectives

The overall objectives of emergency evacuation operations and notifications are to:

- Expedite the movement of persons from hazardous areas;
- Institute access control measures to prevent unauthorized persons from entering vacated, or partially vacated areas;
- Provide for evacuation to appropriate transportation points, evacuation points, and shelters;
- Provide adequate means of transportation for persons with disabilities, the elderly, other persons with access and functional needs, and persons without vehicles;
- Provide for the procurement, allocation, and use of necessary transportation and law enforcement resources by means of mutual aid or other agreements;
- Control evacuation traffic;
- Account for the needs of individuals with household pets and service animals prior to, during, and following a major disaster or emergency;
- Provide initial notification, ongoing, and re-entry communications to the public through the Joint Information Center (JIC); and
  - Assure the safe re-entry of the evacuated persons.

The SDCSD is the lead agency for evacuations of areas within the County, including the Project. The SDCSD, as part of a Unified Command, assesses and evaluates the need for evacuations, and orders evacuations according to established procedures. Additionally, as part of the Unified Command, the SDCSD identifies available and appropriate evacuation routes and coordinates evacuation traffic management with the California Department of Transportation (Caltrans), the CHP, the SDCSD, other supporting agencies, and jurisdictions.

The decision to evacuate an area is not made lightly and there is a significant impact to public safety and the economy. The following process describes how emergency evacuation decisions are coordinated, allowing emergency managers and other supporting response organizations to make collaborative decisions.

### 3.2 Evacuation Coordination Process

- 1. If the emergency only impacts the San Pasqual area, the decision to evacuate may be made by a local jurisdiction (Escondido Fire, SDFRD, and SDCFA) with regional collaboration considerations.
  - a. Based on the information gathered, emergency managers will generally make the determination on whether to evacuate communities as the need arises, on a case-by-case basis.
  - b. The decision to evacuate will depend entirely upon the nature, scope, and severity of the emergency; the number of people affected; and what actions are necessary to protect the public.
  - c. Local jurisdictions may activate their Emergency Operations Center (EOC) and conduct evacuations according to procedures outline in their Emergency Operations Plan (EOP) or in this case, the County's EOC may be activated.
  - d. The EOC may make recommendations on whether a jurisdiction should evacuate and may help coordinate the evacuation effort.
  - e. The Evacuation Annex is automatically activated when an incident occurs requiring an evacuation effort that impacts two or more jurisdictions.
  - f. The EOC will coordinate with fire, law enforcement, public health, and other relevant support agencies to obtain recommendations on protective actions.
  - g. The EOC will coordinate with jurisdictional emergency management personnel and other public safety personnel. The Policy Group within the EOC will coordinate with other officials from jurisdictions within the OA to identify command decisions, including:
    - i. Gaining regional situational awareness
    - ii. Determining response status
    - iii. Reviewing status of initial protective actions
    - iv. Considering additional protective actions
    - v. Evaluating public information needs
    - vi. Determining next steps
    - vii. Establishing a regular time to share updates
  - h. The EOC will coordinate emergency public information to citizens in accordance with established procedures.

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- i. The EOC may support coordinating the evacuation response according to the EOP, including:
  - i. Providing transportation for those who need assistance
  - ii. Provide support for people with disabilities and other access and functional needs
  - iii. Coordinate and communicate with the private sector, community groups, and faith based organizations to utilize their services and resources available to support the response
  - iv. Providing shelter for evacuees

### 3.3 Evacuation Response Operations

An evacuation of any area requires significant coordination among numerous public, private, and community/non-profit organizations. Wildfire evacuations will typically allow time for responders to conduct evacuation notification in advance of an immediate threat to life safety; giving staff and visitors time to gather belongings and make arrangements for evacuation. On the other hand, other threats, including wildfires igniting nearby, may occur with little or no notice and certain evacuation response operations will not be feasible (for example, establishing contra flow requires between 24 to 72 hours to be implemented; a no-notice event will not allow for contra flow to be established). Evacuation assistance of specific segments of the population may also not be feasible.

#### 3.3.1 Evacuation Points and Shelters

When the SDCSD or IC implements an evacuation order, they coordinate with the responding fire agency (e.g., RSFFPD/Carlsbad Fire Department (CFD)/SDCFA/Cal Fire), the EOC, and others to decide on a location to use as a Temporary Evacuation Point (TEP). The Sheriff's Department Communication Division will utilize the AlertSanDiego system and will notify local television and radio stations; and the County will use their social media pages and in the field direction of evacuees to the established TEPs or shelters. These evacuation points are often schools or other Red Cross identified shelters, and serve as temporary safe zones for evacuees. Evacuation points will provide basic needs such as food, water, and restrooms. In addition to designated shelters, other points of temporary refuge should include large, well known sites such as shopping centers and libraries. Possible shelters and assembly areas for the Project that could (subject to SDCSD) be designated during an evacuation as short-term refuge sites include refuge sites within urbanized areas of Carlsbad, San Marcos, Vista, Encinitas, San Diego and developed communities primarily to the west of the Project. If there are visitors unable to evacuate and need transportation assistance to get to a TEP or shelter, the SDCSD or IC may establish transportation points to collect and transport people without transportation resources to evacuation points. These points should be large, well-

known sites such as shopping centers, libraries, and schools. Transportation should be accessible to all populations, including people with disabilities and other access and functional needs.

#### 3.3.2 Animal Evacuations

The Pets Evacuation and Transportation Standards Act of 2006 amends the Stafford Act, and requires evacuation plans to take into account the needs of individuals with household pets and service animals prior to, during, and following a major disaster or emergency.

The San Diego County Department of Animal Services (DAS) has plans in place to transport and shelter pets in a disaster under Annex O of the OA EOP, including the Animal Control Mutual Aid Agreement. Animal Control Officers, the San Diego Humane Society, and private animal care shelters will assist in the rescue, transport, and sheltering of small and large animals. In addition, potential volunteer resources and private groups should be identified and tracked in WebEOC. Only non-emergency resources and personnel, such as public and private animal services agencies, will be used to rescue and transport animals during an evacuation effort.

In most cases, DAS and the OA EOC will coordinate and attempt to co-locate animal shelters with people shelters. The Project site does not include animals, other than potential guest service animals. Additional Project-specific animal evacuation information is provided in Section 6.4.2.

#### 3.3.3 Shelter-in-Place

Sheltering-in-place is the practice of going or remaining indoors during or following an emergency event. This procedure is recommended if there is little time for the public to react to an incident and it is safer for the public to stay indoors for a short time rather than travel outdoors. Sheltering-in-place also has many advantages because it can be implemented immediately, allowing people to remain in their familiar surroundings and providing individuals with everyday necessities such as telephone, radio, television, food, and clothing. However, the amount of time people can stay sheltered-in-place is dependent upon availability of food, water, medical care, utilities, and access to accurate and reliable information.

The decision on whether to evacuate or shelter-in-place is carefully considered with the timing and nature of the incident (San Diego County 2018). Sheltering-in-place is the preferred method of protection for people that are not directly impacted or in the direct path of a hazard. This will reduce congestion and transportation demand on the major transportation routes for those that have been directed to evacuate by police or fire personnel. Most new structures incorporate ignition resistant construction, fuel modification zones, and provide defensibility throughout, such as those planned for the Project allow responding fire and law enforcement personnel the ability to direct visitors to temporarily refuge on site.

#### 3.3.4 Area School Protection and Evacuation Planning

This section briefly summarizes the current status of emergency planning for the San Marcos School District represented in the Project area. Nearby Schools include: San Elijo Elementary with approximately 1,050 students and a staff of about 70, San Elijo Middle School with approximately 1,930 students and a staff of about 95 and Double Peak School with approximately 1,200 and a staff of approximately 80.

#### San Marcos Unified School District

The San Marcos Unified School District (SMUSD) has a Risk Management Department to review and recommend related policies for all school sites. The SMUSD regularly reviews its safety, security and risk management policies and makes recommendations to the school board of trustees. The policies describe school administration and student/parent responsibilities during an emergency.

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### 4 QUESTHAVEN EVACUATION ROAD NETWORK AND EVACUATION TIME ESTIMATES

Wildfire emergencies that would be most likely to include an evacuation of the Project would be large wildfires occurring during extreme weather conditions and approaching from the east, or possibly during non-extreme onshore wind events from the west/southwest burning in the Rancho La Costa Reserve. These fires are wind driven and occur during declared Red Flag Warning periods where low humidity and high winds facilitate fire ignition and rapid spread. If a wildfire ignites to the east and is fanned by extreme fire weather conditions, evacuation of the Project site may occur as many as several or more hours prior to actual threatening conditions at the site. Conversely, fires occurring on typical or under onshore wind days have been very successfully controlled at small sizes due to the slower fire spread (higher humidity and plant moisture and lower wind speeds) and fast response and would not typically trigger a need to evacuate the project. Fires burning in the open space fuels to the south or east of the Project, on a typical day (onshore flow) would be much lower threat to the Project and typically result in a reduced potential that evacuation would be necessary.

If a wildfire ignited closer to the Project during weather that facilitates rapid fire spread, significantly less time may be available, and an alternative evacuation approach would need to be considered. History indicates that most human fatalities from wildfires are due to late evacuations when evacuees are overtaken on roads, and while it is preferred to evacuate long before a wildfire is near, it is therefore prudent to consider a contingency option. For example, if a wildfire is anticipated to encroach upon the Project area in a timeframe that is shorter than would be required to evacuate all residents and guests, then options available to responding fire and law enforcement personnel should include the potential to temporarily refuge residents and guests on-site, in the protected structures. In this scenario, residents are instructed to remain in their homes while firefighters perform their structure protection function.

The Project is located within an area that is subject to occasional wildfires, but based on the residential uses to the west, east, and north and open space areas to the south and east, the wildfire potential within the Project structures' direct sphere of influence is considered minimal and direct exposure to unmaintained fuels is limited. Similarly, fire intensity would be expected to be low to moderate in areas outside of the Rancho La Costa Reserve and natural hillside unmaintained fuels. This reduced fire behavior would be expected to facilitate evacuations as well as potential on-site sheltering, if considered safer than a short-notice evacuation. The Project would provide a buffer along San Elijo Road, partially closing an exposure to open space and benefitting the overall evacuation road network in the area.

This approach is consistent with San Diego County's (2018) Evacuation approach which states, "[The shelter-in-place] procedure is recommended if there is little time for the public to react to an incident and it is safer for the public to stay indoors for a short time rather than travel outdoors." Although not a designated shelter-in-place facility, the structures in the Project would include the same level of ignition resistance and landscape maintenance, are defensible against the short duration wildfire exposure anticipated, and are designed to require minimal resources for protection, which enables these contingency options that may not be available to other vicinity communities.

The Project's roads will be consistent with code requirements and will be capable of effectively supporting average daily trips generated by the Project. However, as evidenced by mass evacuations in San Diego County and elsewhere, even with roadways that are designed to the code requirements, it may not be possible, or necessary to move large numbers of persons at the same time. Road infrastructure throughout the United States, and including San Diego County, is not designed to accommodate a short-notice, mass evacuation (FEMA 2008). The need for evacuation plans, pre-planning, and tiered or targeted and staggered evacuations becomes very important for improving evacuation effectiveness.

Among the most important factors for successful evacuations at the Project site is control of intersections downstream of the evacuation area. If intersections are controlled by law enforcement, barricades, signal control, firefighters or other means, potential backups and slowed evacuations can be minimized. Another important aspect of successful evacuation is a managed and phased evacuation declaration. Evacuating in phases, based on vulnerability, location, or other factors, enables the subsequent traffic surges on major roadway to be smoothed over a longer time frame and can be planned to result in traffic levels that flow better than when mass evacuations include large evacuation areas at the same time. This plan defers to Law Enforcement and OES to appropriately phase evacuations and to consider the vulnerability of communities when making decisions. For example, newer development in the area, including the Project's protected structures, will offer its visitors a high level of fire safety on site (refer to the Questhaven Fire Protection Plan (prepared by Dudek, July 2020), along with open-air options for firefighter safety zones and temporary on-site refuge as a contingency, as discussed further in this plan.

Consistent with the County of San Diego evacuation planning annex (2018), major ground transportation corridors in the area will be used as primary evacuation routes during an evacuation effort. The road systems were evaluated to determine the best routes for fire response equipment and "probable" evacuation routes for relocating people to designated safety areas. The primary roadways that would be used for evacuation from the Project are:

- San Elijo Road
- S Rancho Santa Fe Road,
- S Twin Oaks Valley Road,
- SR-78
- I-5

These roads provide access to urbanized areas and major traffic corridors including indirectly to I-15.

During a Project emergency evacuation, the primary and secondary roadways may be providing citizen egress while responding emergency vehicles are inbound. Because the required fire access roads are designed to meet or exceed County of San Diego Consolidated Fire Code, including 24 foot-wide, unobstructed roadways, adequate parking, turning radius, grade maximums, and roadside fuel modification zones, potential conflicts that could reduce the roadway efficiency are minimized, allowing for smoother evacuations.

The Project's primary evacuation routes are accessed from an internal roadway, which connects with the primary ingress/egress road (San Elijo Road) that in turn intersects with primary evacuation routes. There are three primary Project ingress/egress routes:

#### **Primary Ingress/Egress Routes:**

- 1. Westbound Primary Route: San Elijo Road west to S Rancho Santa Fe Road north to SR-78.
- 2. Westbound Secondary Route: San Elijo Road west to S Rancho Santa Fe Road south to I-5.
- 3. Eastern Primary Route: San Elijo Road east to S Twin Oaks Valley Road to SR-78.

Depending on the nature of the emergency requiring evacuation, it is anticipated that the majority of the Project's traffic would exit the Project via San Elijo Road and be directed westbound toward Carlsbad. Currently, due to the median separating east and westbound traffic along San Elijo Road, traffic evacuating from "Street D" can only turn east onto San Elijo Road. To support the movement of Project traffic evacuating via "Street D" west, the Project would include a rolled curb median, immediately north of "Street D", with flexible (drivable) bollards, enabling law enforcement-controlled evacuation to the west along San Elijo Road. Depending on the traffic level, fire location and spread rates, and other factors, evacuation traffic may be directed onto various road options within urban Carlsbad or San Marcos, then to the SR-78 west to I-5 or east I-15 than either north or south. These are the most direct routes out of the Project Area.

Evacuation movement will be determined primarily by the fire's location, its spread rate and direction, and time available before it could threaten evacuation routes, traffic levels, and others. If less time is available, or one or more potential routes are considered unsafe, fire and law enforcement officials may direct all traffic in one direction and may consider directing some area communities or the Project site's residents and guests, to temporarily refuge in protected structures.

#### Fire Access Road Maintenance

Maintenance is an important component for the long-term reliability of all Project roadways, including interior roads. Project maintenance obligations will be as follows:

- Maintenance of onsite fire apparatus access roads and brush and driveway entry points
- Financial reserve for repair of onsite access roads
- Ongoing brush management/Fuel Modification along onsite access roads

### 4.1 Roadway Capacities and Evacuation Time Estimates

Roadway capacity represents the calculated number of vehicles that can reasonably be accommodated on a road. Roadway capacity is typically measured in vehicles per hour and can fluctuate based on the number of available lanes, demand surges, number of traffic signals, construction activity, accidents, and obstructions as well as positively by traffic control measures. The estimated capacities for existing and planned roads are provided in Table 1. These response time estimates consider the incorporation of gates at Project fire access roads.

Each roadway classification has a different capacity based on level of service, with freeways and highways having the highest capacities. Based on various similar project studies using traffic engineer estimates, using industry standard lane capacity information with a conservative approach as the baseline, and a conservative discounting of capacity, roads that would be the most likely available to the Project's visitors and their hourly capacities are presented in Table 1.

Table 1.           Estimated Roadway and Freeway Capacity							
	Estimated Roadway and Freeway Capacity*						
Roadway	Number of Lanes	East	West	North	South	Total for calculation	
San Elijo Road	2	2,320	2,320			2,320	
Rancho Santa Fe Road	3			3,780	3,780	7,560	
Twin Oaks Valley Road	2	2,320	2,320			0	
SR-78	3	6,600	6,600			13,200	

### Draft Conceptual Wildfire Evacuation Plan for Questhaven

Table 1.           Estimated Roadway and Freeway Capacity							
		Estimated Roadway and Freeway Capacity*					
Roadway	Number of Lanes	East	West	North	South	Total for calculation	
I-5	4			8,800	8,800	17,600	

Note: The vehicle capacity estimates utilized for this evacuation plan are based on available information and are discounted for various assumed traffic related slowing during a mass evacuation. This evacuation plan assumes that law enforcement personnel are controlling downstream intersections to maintain traffic flow out of the area. If traffic flow is not maintained, then the estimated evacuation times may increase, potentially substantially, as is the case in any urban area.

Using these averages, the length of time it will take for an area to evacuate can be estimated by dividing the population by the average vehicle occupancy and then dividing by the roadway capacity (Figure 5). The development within the Project is estimated to include 2.87 persons per dwelling unit<sup>1</sup>, which equals approximately 219 persons. During an evacuation, it is calculated that an average of  $2.2^2$  vehicles per household would evacuate, resulting in up to 168 vehicles potentially evacuating in a major incident that required full evacuation of the Project. Table 2 provides a summary of the calculated Project's population and vehicles. Table 3 summarizes existing populations in the Project's vicinity.

#### Figure 5 Evacuation Travel Time Formula.

( Evacuation Population Average Vehicle Occupancy Evacuation Time =

Roadway Capacity

# Table 2Questhaven On-Site Population

	Project
Residential Units	76
Population	219
Vehicles per Residential Unit	2.2
Total Vehicles Potentially Evacuating	168

<sup>&</sup>lt;sup>1</sup> Unites States Census, 2019.

<sup>&</sup>lt;sup>2</sup> Cal Poly San Luis Obispo 2016.

### Draft Conceptual Wildfire Evacuation Plan for Questhaven

Population / Vicinity	Questhaven (Project)	San Elijo Hills Community	University Commons Community	San Elijo Elementary School	San Elijo Middle School	Double Peak School	Total
Dwelling Units	76	3,466 <sup>1</sup>	890 <sup>2</sup>	NA	NA	NA	4,420
Persons per Dwelling Unit <sup>3</sup>	2.87	2.87	2.87	NA	NA	NA	-
Population	219	9,947.42	2,555	NA	NA	NA	12,686
Vehicles per Dwelling Unit	2.2	2.331	2.2	NA	NA	NA	-
Dwelling Vehicles	141	8,076	1,958	NA	NA	NA	10,175
Commercial TSF	NA	34,972	NA	NA	NA	NA	34,972
Parking Spaces per 1,000 SF	NA	4.31	NA	NA	NA	NA	-
Commercial Vehicles	NA	150	NA	NA	NA	NA	150
Persons per School	NA	NA	NA	1,120	2,025	1,280	4,425
School Vehicles <sup>4</sup>	NA	NA	NA	90	120	100	310
Calculated Population	219	9,947	2,555	1,120	2,025	1,280	17,146
Worst Case Total Number of Vehicles Evacuating	168	8,226	1,958	90	120	100	10,662

 Table 3.

 Population and Evacuating Vehicle Estimates for the Project and Vicinity Land Uses

Notes:

1 Values taken from the San Elijo Hills Specific Plan

2 Dwelling units for the portion on this development along San Elijo Road only

3 United States Census, 2019

4 Includes buses used to evacuate students, and a vehicle for each staff member

The number of evacuating vehicles would likely be lower than estimated, as some families would likely drive in one vehicle versus in multiple vehicles, and depending on the time of day, many of these vehicles may already be off-site, such as if a fire occurred during typical work hours.

### 4.1.1 Questhaven Evacuation Travel Time

For purposes of determining an appropriate discount on the travel time vehicle capacity estimate, it is important to know the potential worst-case evacuation population (number of vehicles) that could occur. Discounting the maximum vehicle capacity essentially slows down the calculated travel times, imitating congested roadways and/or bottleneck intersections. Based on the Project's estimated potential 168 vehicles and utilizing a vehicle capacity of 1,000 vehicles per hour, it is estimated that the last vehicle can be off the Project Site and onto San Elijo Road in just over 10 minutes of wheels rolling. From the Project's intersection with San Elijo Road, it is approximately 1 mile to S Rancho Santa Fe Road and 4 miles to SR-78 from the intersection of San Elijo Road and S Rancho Santa Fe Road. Traveling at approximately 10 mph, assuming all other populations along San Elijo Road are simultaneously evacuating west would require approximately 275.8 minutes (10,662 vehicles/2,320 vehicles per hour).

#### 4.1.2 Mass Evacuation Vehicle Traffic

San Elijo Hills Specific Plan (SEHSP) encompasses approximately 2,000 acres east of the project site, with a maximum of 3,466 dwelling units permitted within the Specific Plan area. If all permitted units are constructed within the SEHSP there will be a maximum of 7,626 vehicles evacuating that are located east of the Project Site. Within the SEHSP there is also a total of 34,972 square feet of commercial space within the San Elijo Hills Town Center, which according to the SEHSP would require approximately 150 parking spaces (4.3 spaces per thousand square feet of gross floor area). The portion of University Commons that would evacuate using San Elijo Road has approximately 890 residential units. Additionally, there are a total of approximately 4,425 students and teachers reside at the three schools along San Elijo Road, many of which reside within San Elijo Hills, so do not represent additional population. Evacuations of this population would include buses and passenger vehicles with a total of up to 65 buses and an estimated 245 vehicles. This Project's additional vehicle volume would not be expected to materially impact evacuation of the existing development.

During a large wildfire moving from east to west, it is most likely, that evacuations would be directed both east and west along San Elijo Road, depending on the fire location and movement. However, the discounted travel speeds (2,320 vehicles per hour) includes capability to absorb additional vehicles. This analysis assumes that all existing populations along San Elijo Road are evacuating simultaneously.

### 4.1.3 Potential for Project Evacuation Impact on Existing Condition

The potential occurrence of a large evacuation event including evacuation of existing populations to the east and west of the Project is possible. In this case, the existing populations would be associated with San Elijo Hills, University Commons, San Elijo Elementary School, San Elijo Middle School, and Double Peak School.

As mentioned, this analysis caps the evacuation route traffic capacity at 1,000 vehicles per hour on the site's roads and 2,320 vehicles per hour on the San Elijo Road in each direction. This capacity is lower than each travel lane could support under ideal conditions, but is utilized as a method to reflect evacuation conditions, where there may be a traffic surge that slows vehicle speeds. Understanding the speed vehicles would travel to support 1,000 or 2,320 vehicles per hour provides additional supporting context. If the average vehicle is approximately 16 feet long, and allowing approximately 10 feet between vehicles (26 total feet per vehicle) for 1,000 vehicles per hour and 15 feet between vehicles (31 total feet per vehicle) for 2,320 vehicles per hour, an average travel speed of approximately 5 or 10 mph would enable 1,000 or 2,000 vehicles to pass a given point every hour, respectively. This is calculated by the following:

- 1,000 vehicles per hour = 16.67 vehicles per minute = 1 vehicle every 3.6 seconds
  - 5 mph = 7.35 feet per second (1 mph = 1.47 feet per second)

Therefore, at 7.35 feet/second x 3.6 seconds = 26.5 feet. Each vehicle (16 feet + 10 feet = 26 feet) is allotted 3.6 seconds to pass a given point. In order for 1,000, 2,000, or 3,000 vehicles to pass that given point, a speed of 4.9, 9.8 and 14.8 mph is necessary, respectively, per Table 4. The average human walking speed is around 3 mph.

Vehicles per hour	Vehicles per minute	Seconds for a vehicle (26') to pass a given point	Feet per second for a vehicle to pass a given point	mph for a vehicle to pass a given point
1000	16.67	3.60	7.22	4.9
1200	20	3.00	8.82	6
2000	33.33	1.80	14.44	9.8
3000	50	1.20	21.67	14.8

 Table 4

 Vehicle Speeds Based on Road Capacity

## Draft Conceptual Wildfire Evacuation Plan for Questhaven

Therefore, the following travel time and evacuation estimates are not reliant on unrealistic vehicle speeds in order to achieve the use of 1,000 and up to 2,320 vehicles per hour capacity and are representative of congested roadways that can occur during evacuations, especially the initial phase where traffic surges are common. It is likely that more than 2,320 vehicles per hour would be possible on San Elijo Road with law enforcement traffic control. A commonly used capacity is 1,900 vehicles per lane, but this study evaluates the estimated travel time in a conservative manner at 1,160 vehicles per lane.

Based on the factors and assumptions previously detailed regarding evacuation routes, and incorporating standard pre-evacuation timeframes and the evacuation route estimates detailed in Table 5, it is estimated that the existing condition would see all evacuating traffic from San Elijo Hills, University Commons and the three schools evacuate via San Elijo Road to S Rancho Santa Fe Boulevard then to SR-78. With the Project, the same traffic conditions are expected, but the Project's traffic would also be added to the formula.

	Existing Co (Scenario 1		Existing Conditions + Project (Scenario 2)		Existing Conditions + Project (Scenario 3)		Existing Conditions + Project (Scenario 4)	
Evacuation Route using;	Percent of Vehicles	Total Vehicles	Percent of Vehicles	Total Vehicles	Percent of Vehicles	Total Vehicles	Percent of Vehicles	Total Vehicles
San Elijo Road to S Rancho Santa Fe Road to SR-78	25	2,623	25 (EC) / 50 (P)	2,623 (EC) / 84 (P)	50 (EC) / 50 (P)	5,247 (EC) / 71 (P)	35 (EC) / 50 (P)	3,673 (EC) / 84 (P)
San Elijo Road to S Rancho Santa Fe Road to I-5	25	2,624	25 (EC) / 50 (P)	2,624 (EC) / 84 (P)	50 (EC) / 50 (P)	5,247 (EC) / 70 (P)	35 (EC) / 50 (P)	3,673 (EC) / 84 (P)
San Elijo Road to S Twin Oaks Road to SR-78	50	5,247	50 (EC)	5,247 (EC)	-	-	30 (EC)	3,148 (EC)
Total	100	10,494	100	2,623+ 2,623+ 5,247+ 84+ 84 =10,662	100	5,247+ 5,247+ 84+ 84=10,662	100	3,673+ 3,673+ 3,148+84+ 84 =10,635

Based on the preceding assumptions and the travel time formula, the time estimates for the existing condition and the Project scenario are summarized in Table 6. As noted, there is virtually no change

in overall travel time in these region wide evacuation travel time scenarios. This is due to the relatively small number of additional vehicles that would be generated by the Project.

Route: Scenario	1. Existing	Cond. +	3. Existing Cond. +	4. Existing Cond. +	Minimum Road Capacity (vehicles	Existing Cond. Estimated Evacuation Travel	Evacuation	Travel Time Increase with Project
San Elijo Road to	2,623	2,623 (EC)	5,247 (EC) /	3,673	2,320	2,623 vehicles	2,707 vehicles	0.04 hrs or
S Rancho Santa		/ 84 (P)	84 (P)	(EC) / 84		1.13 hrs or	1.17 hrs or	2 min
Fe Road to SR-78				(P)		68 min	70 min	
San Elijo Road to	2,623	2,623 (EC)	5,247 (EC) /	3,673	2,320	2,623 vehicles	2,707 vehicles	0.04 hrs or
S Rancho Santa		/ 84 (P)	84 (P)	(EC) / 84		1.13 hrs or	1.17 hrs or	2 min
Fe Road to I-5				(P)		68 min	70 min	
San Elijo Road to	5,247	5,247 (EC)	0	3,148	2,320	5,247 vehicles	5,247 vehicles	0 hrs or
S Twin Oaks				(EC)		2.26 hrs or	2.26 hrs or	0 min
Road to SR-78						136 min	136 min	
Total Vehicles	10,494	10,662	10,662	10,662	NA	NA	NA	NA

### Table 6. Project Evacuation Travel Timeframes\*

Includes "wheels rolling" where all persons have left their home. Does not include notification, mobilization and travel out of the area
 Estimated evacuation travel timeframe is calculated by dividing the maximum number of vehicles using each evacuation route by the route's lowest vehicle capacity. The longest evacuation route timeframe is used to represent the overall travel time.

The Project evacuation scenario results in a worst-case calculated 2.26 hours or 136 minutes travel time to fully evacuate all studied populations. With the Project, there is an increase in the calculated evacuation travel time of up to an estimated 2 minutes for all evacuation routes.

This travel time calculation is very conservative in both the number of vehicles evacuating and the number of vehicles per hour that can be accommodated.

# 4.2 Evacuation Route Determination

Typically, fire and law enforcement officials will identify evacuation points before evacuation routes are announced to the public. Evacuation routes are determined based on the location and extent of the incident and its spread rate and direction and include as many pre-designated transportation routes as possible. However, field conditions and shifting fire behavior may result in real-time changes to predetermined routes. Having additional evacuation route options is considered critical in these conditions. Under extreme fire weather events, it is unlikely that evacuation would occur to the east and this analysis assumes all traffic, existing and proposed Project related would be sent west on SR-78.

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# 5 QUESTHAVEN RESIDENT FIRE/ EVACUATION AWARENESS

The Questhaven HOA will be active in its outreach to residents regarding fire safety and general evacuation procedures. There are aspects of fire safety and evacuation that require a significant level of awareness by residents and emergency services in order to reduce and/or avoid problems with an effective evacuation. Mitigating potential impediments to successful evacuations requires focused and repeated information through a strong educational outreach program. The Questhaven HOA will engage residents and RSFFPD/CFD/SDCFA through a variety of methods.

This emergency evacuation plan will be available to each homeowner/resident as well as being accessible on the HOA's website. Annual review and updates to the safety information on the website will be available for residents to review the plan and be familiar with evacuation protocols. The Questhaven HOA will coordinate with RSFFPD/CFD/SDCFA to update annual fire safety and evacuation preparedness information as needed. Representatives of RSFFPD/CFD/SDCFA will be invited to visit the Project review important fire safety and evacuation information. The focus of these meetings will be on the importance of ensuring residents are properly prepared and familiar with the concept of the "Ready, Set, Go!" evacuation plan. The "Ready, Set, Go!" program is defined at: https://www.sandiego.gov/sites/default/files/rsg-english.pdf and information about preparing an individual Action Plan is provided in Appendix A.

The focus of the "Ready, Set, Go!" program is on public awareness and preparedness, especially for those residing in the wildland-urban interface (WUI) areas. The program is designed to incorporate the local fire protection agency as part of the training and education process in order to ensure that evacuation preparedness information is disseminated to those subject to the potential impact from a wildfire. There are three components to the program:

**"READY"** – Preparing for the Fire Threat: Take personal responsibility and prepare long before the threat of a wildfire so you and your home are ready when a wildfire occurs. Create defensible space by clearing brush away from your home as detailed in the Questhaven FPP (Dudek 2020). Confirm you are registered for Reverse 9-1-1 and AlertSanDiego alert systems. Make sure all residents residing within the home understand the plan, procedures and escape routes.

"SET" – Situational Awareness When a Fire Starts: If an emergency occurs and there is potential for it to threaten the Questhaven community's surrounding areas, pack your vehicle with your emergency items. Stay aware of the latest news from local media, your local law enforcement and local fire department for updated information on the emergency. If you are uncomfortable, leave the area, unless you have been directed to remain in your home or at a designated community safe refuge site.

"GO!" – Leave Early! Following the Action Plan provides knowledge of the situation and how to approach evacuation. Leaving early, well before a wildfire is threatening the area provides the least delay and results in a situation where, if a majority of downstream residences and visitors also leave early, firefighters are now able to better maneuver, protect and defend structures, evacuate other visitors who couldn't leave early, and focus on citizen safety.

"READY! SET! GO!" is predicated on the fact that being unprepared and attempting to flee an impending fire late (such as when the fire is physically close to your location or evacuation route) is dangerous and exacerbates an already confusing situation. This Project's evacuation plan provides key information that can be integrated into evacuation planning, including the best available routes for them to use in the event of an emergency evacuation.

Situation awareness requires a reliable information source. One of the most effective public notification methods is Reverse 9-1-1. The San Diego OES operates the reverse 9-1-1 notification system that provides a recorded message over landline telephone systems relating to evacuation notices. In addition, the (OES) operates a program known as "AlertSanDiego" that has the capability to send emergency notifications over both landlines as well as to cell phones and via text messages. It is up to individual visitors to register their cell phones for "AlertSanDiego". The registration of cell phones can be done online at www.ReadySanDiego.com. All residents should register landlines and mobile numbers.

The Questhaven CWEP will be recorded against title to all properties and regularly promoted by the community's HOA to ensure the homeowners, renters, guests, and visitors are familiar with the wildfire emergencies that may occur and of potential actions they may be required to implement. Additionally, copies of the Evacuation Plan will be available with Questhaven's HOA upon request. As part of the approval of this project, it is important for the Questhaven HOA to actively participate as a partner with the SDFRD/SDCFA to assist with the coordination and distribution of fire safety information they develop.

## 6 QUESTHAVEN EVACUATION PROCEDURES

### 6.1 Relocation/Evacuation

Wolshon and Marchive (2007) simulated traffic flow conditions in the wildland urban interface (WUI) under a range of evacuation notice lead times and housing densities. To safely evacuate more people, they recommended that emergency managers (1) provide more lead-time to evacuees and (2) control traffic levels during evacuations so that fewer vehicles are trying to exit at the same time. In some emergencies, more lead-time will be possible while in others, it will not. Traffic controls may be possible with longer lead times, but may be limited to controlling some intersections during short notice events.

Wildfire emergency response procedures will vary depending on the type of wildfire and the available time in which decision makers (IC, RSFFPD/CFD/SDCFA, SDCSD, and/or County Office of Emergency Management) can assess the situation and determine the best course of action. Based on the Project, its road network, and the related fire environment, the primary type of evacuation envisioned is an orderly, pre-planned evacuation process where people are evacuated from the Project to urban areas further from an encroaching wildfire (likely to urban areas west) well before fire threatens. This type of evacuation must include a conservative approach to evacuation, i.e., when ignitions occur and weather is such that fires may spread rapidly, evacuations should be triggered on a conservative threshold. This threshold must include time allowances for unforeseen, but possible, events that could slow the evacuation process.

Evacuation is considered by many to offer the highest level of life protection to the public, but it can result in evacuees being placed in harm's way if the time available for evacuation is insufficient (Cova et al. 2011). An example of this type of evacuation, which is highly undesirable from a public safety perspective, is an evacuation that occurs when fire ignites close to vulnerable communities. This type of situation is inherently dangerous because there is generally a higher threat to persons who are in a vehicle on a road when fire is burning in the immediate area. Conditions may become so poor, that the vehicle drives off the road or crashes into another vehicle, and flames and heat overcome the occupants. This scenario occurred in San Diego County during the 2003 Cedar Fire and in the 2017 northern California wildfires. This type of evacuation must be considered a very undesirable situation by law and fire officials in all but the rarest situations where late evacuation may be safer than seeking temporary refuge in a structure (such as when there are no nearby structures, the structure(s) is/are already on fire, or when there is no other form of refuge).

The third potential type of evacuation is a hybrid of the first two. In cases where evacuation is in process and changing conditions result in a situation that is considered unsafe to continue evacuation, it may be advisable to direct evacuees to pre-planned temporary refuge locations, including the onsite buildings if they are ignition resistant and defensible, such as those at the Project. As with the second type of evacuation discussed above, this situation is considered highly undesirable, but the evacuation pre-planning must consider these potential scenarios and prepare decision makers at the IC level and at the field level for enacting a contingency to evacuation when conditions dictate.

Indications from past fires and related evacuations in San Diego County and throughout Southern California, which have experienced large wildfires, are that evacuations are largely successful, even with a generally unprepared populace. It then stands to reason that an informed and prepared populace would minimize the potential evacuation issues and related risk to levels considered acceptable from a perspective.

Evacuation orders or notifications are often triggered based on established and pre-determined buffers. These buffers are often hard or soft lines on a map and are based on topography, fuel, moisture content of the fuels, and wind direction. Evacuations are initiated when a wildfire reaches or crosses one of these pre-determined buffers. Evacuations can also be very fluid. The IC, law enforcement, and County OES would jointly enact evacuations based on fire behavior.

# 6.2 **Questhaven Evacuation Baseline**

For purposes of this CWEP, the first and most logical choice for all of the residents and visitors within the Project's boundaries is to adhere to the principals and practices of the "READY! SET! GO!" Program previously mentioned in this document. As part of this program, it is imperative that the Project HOA develop a plan that is clearly understood by residents and visitors, and made available onsite for reference and review by any resident, visitor or fire department staff requesting to see the plan. The Evacuation Plan should also be made available on the Questhaven HOA website and updated as needed. In addition, it is imperative that the "READY! SET! GO!" information be reviewed with residents annually along with the accompanying maps illustrating evacuation routes, temporary evacuation points and pre-identified safety zones. To ensure this information is provided on an annual basis, the Community HOA could annually hire a third party to manage an outreach and emergency preparedness education and coordination with RSFFPD and CFD. It must be kept in mind that conditions may arise that will dictate a different evacuation route than the roads used on a daily basis.

Residents and visitors are urged to follow the directions of emergency notices and personnel and to evacuate as soon as they are notified to do so or earlier, if they feel uncomfortable. Directions on evacuation routes will be provided in most cases, but when not provided, Project residents and

visitors will proceed according to known available routes away from the encroaching fire as detailed in Section 1 of this plan. Residents and visitors are cautioned not to rely on navigation apps which may inadvertently lead them toward an oncoming fire.

**Note:** This CWEP should be updated periodically (suggested every 5 years) to review changing conditions in the area and to refine evacuation options, routes, and contingencies as the landscape and road system develops over time.

## 6.3 Civilian and Firefighter Evacuation Contingency

As of this document's preparation, no one in California has been directed to shelter in place during a wildland fire. Even the communities in Rancho Santa Fe, California which are designed and touted as shelter-in-place communities, were evacuated during the 2007 Witch Creek Fire. This is not to say that people have not successfully sheltered in place during wildfire; there are numerous examples of people sheltering in their homes, in hardened structures, in buildings, in swimming pools, and in cleared or ignition resistant landscape open air areas. The preference for the Project will always be early evacuation following the "Ready, Set, Go!" model, but there exists the potential for unforeseen civilian evacuation issues, and having a contingency plan will provide direction in these situations that may result in saved lives.

Potential problems during wildfire evacuation from the Project include:

- Fires that prevent safe passage along planned evacuation routes (particularly for San Elijo Road
- Inadequate time to safely evacuate
- Fire evacuations during peak traffic conditions or when large events are occurring
- Blocked traffic due to accidents or fallen tree(s) or power pole(s)
  - The need to move individuals who are unable to evacuate

It is recommended that SDCSD and SDCFA/RSFFPD/CFD conduct concerted pre-planning efforts focusing on evacuation contingency planning for civilian populations when it is considered safer to temporary seek a safer refuge than evacuation.

### 6.3.1 Safety Zones

The International Fire Service Training Association (IFTSA; Fundamentals of Wildland Fire Fighting, 3rd Edition) defines Safety Zones as areas mostly devoid of fuel, and which are large enough to assure that flames and/or dangerous levels of radiant heat will not reach the personnel occupying them. Areas of bare ground, burned over areas, paved areas, and bodies of

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water can all be used as safety zones. The size of the area needed for a safety zone is determined by fuel types, its location on slopes and its relation to topographic features (chutes and saddles) as well as observed fire behavior. Safety zones should never be located in topographic saddles, chutes or gullies. High winds, steep slopes or heavy fuel loads may increase the area needed for a Safety Zone.

The National Wildland Fire Coordinating Groups (NWFCG), Glossary of Wildland Fire Terminology provides the following definitions for Safety Zone and Escape routes:

Safety Zone. An area cleared of flammable materials used for escape in the event the line is outflanked or in case a spot fire causes fuels outside the control line to render the line unsafe. In firing operations, crews progress so as to maintain a safety zone close at hand allowing the fuels inside the control line to be consumed before going ahead. Safety zones may also be constructed as integral parts of fuel breaks; they are greatly enlarged areas which can be used with relative safety by firefighters and their equipment in the event of blowup in the vicinity.

According to NWFCG, Safety Zone(s):

- Must be survivable without a fire shelter
- Can include moving back into a clean burn
- May take advantage of natural features (rock areas, water, meadows)
- Can include Constructed sites (clear-cuts, roads, helispots)
- Are scouted for size and hazards
- Consider the topographic location (larger if upslope)
- Should be larger if downwind
- Should not include heavy fuels
- May need to be adjusted based on site specific fire behavior

The definition for a safety zone includes provisions for separation distance between the firefighter and the flames of at least four times the maximum continuous flame height. Distance separation is the radius from the center of the safety zone to the nearest fuels. For example, considering potential 50-foot-tall flame lengths in untreated fuels adjacent a site, then a 200-foot separation would be required, and potentially more if there were site-specific features that would result in more aggressive fire behavior. The fuels adjacent the Proposed Project are maintained groves and vineyards and the desired setbacks would be achieved on the interior roads within the Proposed Project's developed areas.

If one considers the ignition resistant and maintained landscaping within the Project vicinity's adjacent residential, institutional and commercial developments, along with the adjacent 100 feet wide fuel modification zones, and Chapter 7A of California Building Code compliant structures, the Project provides Safety Zones available to responding firefighters. The Project's structures as Safety Zones can be part of RSFFPD/CFD/SDCFA and County's pre-planning efforts, although during a fire, the identified safety zones may not be feasible due to distance, location, fire behavior, etc.

Identification of potential safety zones will require additional focused study by RSFFPD/CFD/SDCFA and other fire and law enforcement agencies.

### 6.3.2 Temporary Firefighter Refuge Areas

Firescope California (Firefighting Resources of Southern California Organized for Potential Emergencies) was formed by legislative action to form a partnership between all facets of local, rural, and metropolitan fire departments, California Department of Forestry and Fire Protection (CAL FIRE), and federal fire agencies. Firescope defines a contingency plan when it is not possible to retreat to a safety zone. This contingency includes establishment of firefighter Temporary Refuge Areas (TRA), which are defined as:

A preplanned area where firefighters can immediately take refuge for temporary shelter and short-term relief without using a fire shelter (fire resistant tent) in the event that emergency egress to an established Safety Zone is compromised.

Examples of a TRA may include the lee side of a structure, inside of a structure, large lawn or parking areas, or cab of fire engine, amongst others. Differences between a TRA and a Safety Zone is that TRA's are closer to the immediate firefighting area, are considered a contingency to being able to get to a Safety Zone, do not include a requirement for a large area set back four times the flame lengths of adjacent fuels, and cannot be feasibly pre-planned until firefighters arrive on scene and size up the situation.

Firescope appropriately notes that although Safety Zones and viable Escape Routes shall always be identified in the WUI environment, they may not be immediately available should the fire behavior increase unexpectedly. Often a TRA is more accessible in the WUI environment. A TRA will provide temporary shelter and short-term relief from an approaching fire without the use of a fire shelter and allow the responders to develop an alternate plan to safely survive the increase in fire behavior.

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TRAs are pre-planned areas (planned shortly after firefighters arrive on scene) where firefighters may take refuge and temporary shelter for short-term thermal relief, without using a fire shelter in the event that escape routes to an established safety zone are compromised. The major difference between a TRA and a safety zone is that a TRA requires another planned tactical action, i.e., TRAs cannot be considered the final action, but must include self-defense and a move out of the area when the fire threat subsides. A TRA should be available and identified on site at a defended structure. TRAs are <u>NOT</u> a substitute for a Safety Zone. TRA pre-planning is difficult, at best because they are very site and fire behavior specific. For the Project, TRAs would likely include navigating into the Project site where up to 100-foot-wide fuel modification zones provide wide defensible space areas. Additionally, maintained landscapes along with ignition resistant structures that offer numerous potential opportunities for TRA.

The developed portions of the Project site, but especially the interior areas of the site's residential structures are considered TRAs. This is an important concept because it offers last-resort, temporary refuge of firefighters, and in a worst-case condition, residents and visitors. This approach would be consistent with Firescope California (2013) which indicates that firefighters must determine if a safe evacuation is appropriate and if not, to identify safe refuge for those who cannot be evacuated, including civilians.

Each of the site's structures can be considered for TRA include the following features:

- Ignition Resistant Construction
- Minimum of 100-foot wide Fuel Modification Zone around perimeter of project
- Wide roadways with fire hydrants
- Maintained landscapes and roadside fuel modification
- Ember resistant vents
  - Interior fire sprinklers

Because there is the possibility that evacuation of the project may be less safe than temporarily refuging on site; such as during a fast-moving, wind or slope driven fire that ignites off of San Elijo Road, in the Rancho La Costa Reserve or the sloping hills south, west and east of the site; including temporary refuge within structures or elsewhere on site is considered a contingency plan for the Proposed Project. This concept is considered a component of the "Ready, Set, Go!" model as it provides a broader level of "readiness" should the ability to execute an early evacuation be negated by fire, road congestion, or other unforeseen issues. This approach would be considered a last-resort contingency during wildfire with the primary focus being on early evacuation. The

decision for evacuation or temporarily refuging on site will be made by responding law enforcement and/or fire personnel.

# 6.4 Social Aspects of Wildfire Evacuation

Orderly movement of people is the result of planning, training, education, and awareness, all of which are promoted in San Diego County and by RSFFPD/CFD/SDCFA. Evacuation has been the standard term used for emergency movement of people and implies imminent or threatening danger. The term in this CWEP, and under the "Ready, Set, Go!" concept, indicates that there is a perceived threat to persons and movement out of the area is necessary, but will occur according to a pre- planned and practiced protocol, reducing the potential for panic.

Citizen reactions may vary during an evacuation event, although several studies indicate that orderly movement during wildfire and other emergencies is not typically unmanageable. Evacuation can be made even less problematic through diligent public education and emergency personnel training and familiarity. Social science research literature indicates that reactions to warnings follow certain behavior patterns that are defined by people's perceptions (Aguirre 1994, Drabek 1991, Fitzpatrick and Mileti 1994, Gordon 2006, Collins 2004) and are not unpredictable. In summary, warnings received from credible sources by people who are aware (or have been made aware) of the potential risk, have the effect of an orderly decision process that typically results in successful evacuation. This success is heightened when evacuations are not foreign to visitors (Quarantelli and Dynes 1977; Lindell and Perry 2004) as will occur within the Project. Further, in all but the rarest circumstances, evacuees will be receiving information from credible sources during an evacuation. Further, it would be anticipated that law enforcement and/or fire personnel would be on site to help direct traffic and would be viewed by evacuees as knowledgeable and credible. The importance of training these personnel cannot be understated and annual education and training regarding fire safety and evacuation events will be essential for successful future evacuations.

### 6.4.1 Evacuation of Special Populations

Vogt (1990 and 1991) defines special populations as those groups of people who, because of their special situations or needs, require different planning strategies from those of the general population. Special needs populations include those in institutions or special facilities, those with disabilities in homes, those who need care, children, and others who cannot provide for their own evacuation if necessitated. The special needs population is concentrated in facilities, but is also widespread in terms of facility locations and those who live in residences. Special needs populations may include the hearing or visually impaired, foreign speaking, visitors passing

through the area, temporary visitors such as day workers, and the non- ambulatory confined to wheelchairs either temporarily or permanently.

Tourists and temporary visitors may not have knowledge of the area's fire hazard, they may not know how to react in a fire emergency, and they may not understand what they are being told to do. Conversely, this segment of the population would typically be easier to evacuate quickly as they have no possession or pets that they would need to prepare. They can get in their cars and be directed out of the area.

The reasons why special needs populations may fail to respond to warnings to take protective actions is that they may require special transportation while others require different types of warnings or technologies to receive a warning. Some groups must rely on caregivers to hear the warning and respond.

### **Questhaven Approach:**

Questhaven residents will be strongly encouraged to notify RSFFPD/CFD/SDCFA and/or County OES and Health and Human Services of special needs so that accommodations for their notification (Accessible AlertSanDiego, CERT programs, or other), transportation or other special requirements can be provided during an emergency evacuation. Visitors to the Project site will be advised of their options during an emergency by law enforcement or fire officials, onsite staff or management representatives, as appropriate.

### 6.4.2 Animal Evacuations

Animal evacuations present a host of challenges that may affect the overall successful movement of people and their possessions out of harm's way. For example, livestock owners do not always have the means to load and trailer their livestock out of the area. Further, most wildfire evacuation relief shelters or commercial lodging facilities do not allow people to bring in pets or other animals. Sorensen and Vogt (2006) indicate that an issue receiving increasing attention is what evacuees do with pets or other animals such as livestock when they leave their homes and whether having pets or animals impacts their decision to evacuate.

### **Questhaven Approach:**

Questhaven will not accommodate livestock on-site. However, household pets are a common occurrence. Residence should register their animals in the event they are unable to successfully evacuate them in an emergency. This way, volunteer organizations can reunite pets and owners post-emergency. The Questhaven HOA should develop a strong outreach program for pet owners so they understand their responsibilities and that they will not likely be allowed re-entry once evacuated.

### 6.4.3 Re-Entry Procedures

An important component of evacuations is the citizen re-entry process. Guidance and procedures to ensure a coordinated, safe, and orderly re-entry into impacted communities following an incident is provided in the County of San Diego Re-Entry Protocol.

Re-entry will be initiated by the Incident Commander/Unified Command of the Incident Management Team, with the support of the Director of Emergency Services, the OA EOC Director, and the Operations Section Chief at the OA EOC. In most cases, the OA EOC will remain activated until full re-entry is complete. In the event that the OA EOC has been deactivated, the Incident Commander or the Liaison Officer of the Incident Management Team will initiate re-entry procedures.

The Incident Commander will designate a Re-Entry Coordinator and the Operations Section Chief of the OA EOC will coordinate with and support the re-entry coordinator. The Re-Entry Coordinator is responsible for coordinating the re-entry procedures with all involved agencies and ensuring effective communication. Priorities for re-entry include:

The impacted areas must be thoroughly investigated to ensure it is safe for visitors to return and normal operations have been restored. This assessment will include verification that:

• The public will be notified of the re-entry status through the notification measures previously mentioned in this annex, including www.SDCountyEmergency.com, SDEmergency App for smart phones, emergency broadcast radio, television, press releases, informational phone-lines such as 2-1-1, briefings, and informational updates at shelters.

Re-entry of the Proposed Project site would be limited to management and staff.

Once evacuees are permitted to return, it is important that procedures are established to properly identify visitors and critical support personnel, as well as ensure the legitimacy of contractors, insurance adjustors, and other personnel. Re-entry points should be staffed by law enforcement personnel.

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# 7 LIMITATIONS

This CWEP has been developed based on wildfire and evacuation standards and the San Diego County Evacuation Annex Q (San Diego County 2018) and is specifically intended as a guide for evacuations for the Project. This plan provides basic evacuation information that will familiarize Project residents and visitors with the evacuation route options that may be available to them during an emergency. However, because emergencies requiring evacuation have many variables and must be evaluated on a case-by-case basis, this plan shall be subservient to real-time law enforcement and fire personnel/agencies' decision-making and direction during an emergency requiring evacuation.

This CWEP promotes the "Ready, Set, Go!" model, adopted by Rancho Santa Fe Fire Protection District, San Diego County Fire Authority, CAL FIRE, and many fire agencies statewide. The goal is to raise agency and citizen awareness of potential evacuation issues and get a majority of the public "Ready" by taking a proactive stance on preparedness, training drills, visitor education, and evacuation planning efforts. The Project's management and on-site staff will be "Set" by closely monitoring the situation whenever fire weather occurs and/or when wildland fire occurs, and elevating pre-planned protocol activities and situation awareness. Lastly, officials will implement the plan and mandate that populations "Go" by executing pre-planned evacuation procedures, considering proposed evacuation trigger thresholds, in a conservative manner, i.e., evacuation will occur based on conservative decision points, as proposed in this evacuation plan or when directed by fire and law enforcement personnel, whichever is more conservative. The preferred alternative will always be early evacuation. However, there may be instances when evacuation is not possible, is not considered safe, or is not an option based on changing conditions. For example, should a fire occur with short notice and make evacuation from the project ill advised, a contingency plan for visitors is available. This contingency would include moving people to pre-designated temporary refuge areas, including possibly within the Project's structures, until it is safe to evacuate or the threat has been mitigated. Note that during the weather periods where fire ignition and spread is most likely, events will not be allowed at the site.

Ultimately, it is the intent of this Plan to guide the implementation of evacuation procedure recommendations such that the process of evacuating people from the Project is facilitated in an efficient manner and according to a pre-defined evacuation protocol; as well as providing a contingency option of temporarily refuging, if evacuation is considered less safe.

The Project's residents will be aware of and familiar with this evacuation plan as the HOA will post it on its Website and provide information on an annual basis and to visitors upon request. This educational outreach will result in a populace that understands the potential for evacuations and the routes and options that may be presented to them.

## Draft Conceptual Wildfire Evacuation Plan for Questhaven

During extreme fire weather conditions, there are no guarantees that a given structure will not burn or that evacuations will be successful all of the time. Wildfires may occur in the area that could damage property or harm persons. However, successful implementation of the recommendations outlined in this CWEP will provide for an informed populace. The Project landscape and structures are designed specifically to be resistant to wildfire ignition and perform as a fire adapted project, offering fire and law officials with additional options for resident and visitor safety.

This CWEP does not provide a guarantee that all persons will be safe at all times because of the recommendations proposed. There are many variables that may influence overall safety. This Plan provides a summary for implementation of standard evacuation protocols, suggested roadway enhancements, and public outreach, which should result in reduced wildfire related risk and hazard. Even then, fire can compromise the procedures through various, unpredictable ways. The goal is to reduce the likelihood that the system is compromised through implementation of the elements of this Plan and regular occurring program maintenance and updates.

It is recommended that the evacuation process is carried out with a conservative approach to fire safety. This approach must include maintaining the Project's fuel modification landscape, infrastructural, and ignition resistant construction components according to the appropriate standards, training residents on fire safety and evacuation procedures and embracing a "Ready, Set, Go!" stance on evacuation. Accordingly, evacuation of the wildfire areas should occur according to pre-established evacuation decision points, or as soon as they receive notice to evacuate, which may vary depending on many environmental and other factors. Fire is a dynamic and somewhat unpredictable occurrence, and it is important for anyone living at the wildland-urban interface to educate themselves on practices that will improve safety.

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# **APPENDIX A**

# "Ready, Set, Go!" Personal Wildfire Action Guide

# WILDFIRE IS COMING. ARE YOU...

# DEFENSIBLE SPACE AND HARDENING YOUR HOME.



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THOUSANDS OF WILDFIRES STRIKE CALIFORNIA EVERY YEAR. IT'S NOT A MATTER OF IF YOUR HOME IS AT RISK, BUT WHEN.

ReadyForWildfire.org

# **PLANT AND TREE SPACING**

The spacing between grass, shrubs, and trees is crucial to reduce the spread of wildfire. The spacing needed is determined by the type and size of the shrubs and trees, as well as the slope of the land. For example, a property on a steep slope with larger plant life will require greater spacing between trees and shrubs than a level property that has small, sparse vegetation.

#### **VERTICAL SPACING**

# Remove all tree branches at least 6 feet from the ground.

If shrubs are under trees, additional vertical space is needed. Lack of vertical space can allow a fire to move from the ground to the shrubs to the treetops like a ladder.

> 6 FOOT MINIMUM CLEARANCE

#### **FIRE-SAFE LANDSCAPING**

Fire-safe landscaping isn't necessarily the same thing as a well-maintained yard. Fire-safe landscaping uses fire-resistant plants that are strategically planted to resist the spread of fire to your home.

The good news is that you don't need to spend a lot of money to make your landscape fire-safe. And fire-safe landscaping can increase your property value and conserve water while beautifying your home. For more information on fire-safe landscaping, visit: **ReadyForWildfire.org/landscaping**.

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### MINIMUM VERTICAL SPACING BETWEEN TREES AND SHRUBS

To determine the proper vertical space between shrubs and the lowest branches of trees, use the formula below.

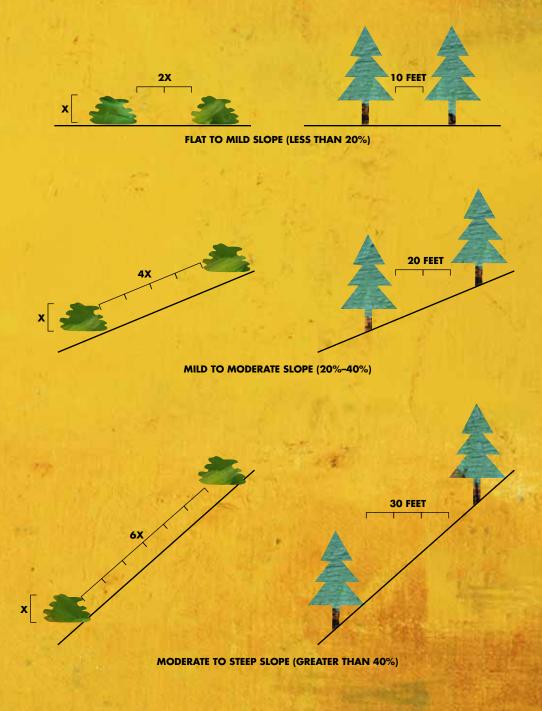
#### **Example:**

A five-foot shrub is growing near a tree.

 $3 \times 5 = 15$  feet of clearance needed between the top of the shrub and the lowest tree branches.

## MINIMUM HORIZONTAL SPACING FOR TREES AND SHRUBS

Horizontal spacing depends on the slope of the land and the height of the shrubs or trees. Check the diagrams below to determine spacing distance.



# **DEFENSIBLE SPACE**

Creating and maintaining defensible space is essential for increasing your home's chance of surviving a wildfire. It's the buffer that homeowners are required to create on their property between a structure and the plants, brush and trees or other items surrounding the structure that could catch fire. This space is needed to slow the spread of wildfire and improves the safety of firefighters defending your home.

#### Two zones make up the required 100 feet of defensible space:

#### ZONE 1—Extends 30 feet out from buildings, decks, and other structures

- Remove all dead plants, grass and weeds.
- 2 Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.
- **3** Trim trees regularly to keep branches a minimum of 10 feet from other trees.
- 4 Remove dead branches that hang over your roof. And keep branches 10 feet away from your chimney.
- 5 Relocate exposed woodpiles outside of Zone 1 unless they are completely covered in a fire resistant material.
- 6 Remove or prune flammable plants and shrubs near windows.
- 7 Remove vegetation and items that could catch fire from around and under decks.
- 8 Create a separation between trees, shrubs and items that could catch fire, such as patio furniture, swing sets, etc.

# **ZONE 2**—Extends 30 to 100 feet from buildings and other structures

- **9** Cut or mow annual grass down to a maximum height of 4 inches.
- **10** Create horizontal spacing between shrubs and trees. (See diagram)
- Create vertical spacing between grass, shrubs and trees. (See diagram)
- 12 Remove fallen leaves, needles, twigs, bark, cones, and small branches. However, they may be permitted to a depth of 4 inches if erosion control is an issue.

# **BOTH ZONES**—0 to 100 feet from buildings and other structures

- 13 Mow before 10 a.m., but never when it's windy or excessively dry.
- 14 Protect water quality. Do not clear vegetation near waterways to bare soil. Vegetation removal can cause soil erosion—especially on steep slopes.

### ARE YOU DOING THE RIGHT THING-THE WRONG WAY?

Each year, CAL FIRE responds to hundreds of fires started by Californians using equipment the wrong way. If you live in a wildland area, all equipment must be used with extreme caution.

Lawn mowers, metal-bladed trimmers, chain saws, grinders, welders, and tractors can all start a wildland fire if not used properly. Do your part to keep your community fire-safe.

#### HERE'S HOW TO DO IT THE RIGHT WAY:

#### Mowing

Metal blades striking rocks can create sparks and start fires in dry grass. Use caution.

#### **Spark Arresters**

In wildland areas, spark arresters are required on all

portable, gasoline-powered equipment. This includes tractors, harvesters, chainsaws, weed-trimmers and mowers.

- Keep the exhaust system, spark arresters and mower in proper working order and free of carbon buildup.
- Use the recommended grade of fuel, and don't top it off.



# KNOW THE LAW BE FIRE SMART

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100 FEET OF DEFENSIBLE SPACE IS REQUIRED UNDER THE PUBLIC RESOURCES CODE (PRC) 4291. CALIFORNIA BUILDING CODE CHAPTER 7A REQUIRES CERTAIN CONSTRUCTION MATERIALS AND METHODS FOR HOMES IN WILDLAND AREAS. BE SURE TO CONTACT YOUR LOCAL FIRE DEPARTMENT FOR ADDITIONAL REQUIREMENTS TO ENSURE YOUR HOME IS COMPLIANT WITH THE LAW. READYFORWILDFIRE.ORG/THELAW

ZONE 2

100 FEET

NEIGHBORING PROPERTY

30 FEET

Π

# ONE 1

2

# HARDENING YOUR HOME

### FLYING EMBERS CAN DESTROY HOMES UP TO A MILE AHEAD OF A WILDFIRE. PREPARE (HARDEN) YOUR HOME NOW BEFORE FIRE STARTS.

#### SOME THINGS YOU CAN DO TO HARDEN YOUR HOME:

**Roof:** Your roof is the most vulnerable part of your home. Homes with wood or shingle roofs are at high risk of being destroyed during a wildfire.

Build your roof or re-roof with materials such as composition, metal or tile. Block any spaces to prevent embers from entering and starting a fire.

**Vents:** Vents on homes create openings for flying embers.

- Cover all vent openings with 1/8-inch to 1/4-inch metal mesh. Do not use fiberglass or plastic mesh because they can melt and burn.
- Protect vents in eaves or cornices with baffles to block embers. (Mesh is not enough.)

#### **Eaves and Soffits:**

Eaves and soffits should be protected with ignitionresistant or non-combustible materials.

Windows: Heat from a wildfire can cause windows to break even before the home ignites. This allows burning embers to enter and start fires inside. Single-paned and large windows are particularly at risk.

- Install dual-paned windows with one pane of tempered glass.
- Consider limiting the size and number of windows that face large areas of vegetation.

**Decks:** Surfaces within 10 feet of the building should be built with ignition-resistant, non-combustible, or other approved materials.

 Remove all combustible items from underneath your deck.

# **Exterior Walls:** Wood products such as boards,

panels or shingles are common siding materials. However, they are combustible and not good choices for fire-prone areas.

- Build or remodel your walls with ignition-resistant building materials, such as stucco, fiber or cement siding, fire-retardant-treated wood, or other approved materials.
- Be sure to extend materials from the foundation to the roof.

**Rain Gutters:** Screen or enclose rain gutters to prevent accumulation of plant debris.

**Patio Cover:** Use the same ignition-resistant materials for patio covers as a roof.

Fences: Consider using ignition-resistant or noncombustible fence materials to protect your home during a wildfire.

#### Additional Home Fire Safety Steps:

Go to ReadyForWildfire.org/hardening for more important information on the following:

- Driveways and Access Road Information
- Address Visibility
- Water Supply Access
- Equipment Use Safety
- Ignition-Resistant Materials

Garage Safety

# **READY, SET, GO! PREPARATION GUIDES**

Preparing for a wildfire starts with three simple steps: Ready, Set, Gol Keep all three wildfire preparation guides on hand as a quick reference for helping your family and property be safe in the event of a wildfire.

### WILDFIRE IS COMING PREPARATION GUIDES:



Step 1: Is Your Home Ready?

Creating defensible space and hardening your home against wildfire.



Step 2: Are You Set?

Developing a Wildfire Action Plan.



Step 3: Are You Ready to Go?

A quick-reference evacuation guide.



Go to ReadyForWildfire.org for more detailed information on all three guides to prepare for and survive a wildfire.

# WILDFIRE IS COMING. ARE YOU...

# GET PREPARED TO EVACUATE BEFORE WILDFIRE STRIKES.



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THOUSANDS OF WILDFIRES STRIKE CALIFORNIA EVERY YEAR. IT'S NOT A MATTER OF IF YOUR HOME IS AT RISK, BUT WHEN.

ReadyForWildfire.org

# USE THIS GUIDE TO PREPARE YOUR EVACUATION PLAN AND EMERGENCY SUPPLY KIT

Once you complete your plan, rehearse and discuss it regularly with your family. Consider practicing the plan at night as well. Keep it in a safe, visible place for quick access when a wildfire emergency occurs.

Reminder: In an emergency it is easy to become confused or panicked. Preparing your wildfire action plan in advance will help keep you focused and able to act quickly when evacuation is anticipated or needed.

For more information on wildfire evacuation planning and survival, see the Ready for Wildfire "Go!" brochure or visit ReadyforWildfire.org/go.



# KNOW THE LAW BE READY TO EVACUATE

CALIFORNIA LAW AUTHORIZES OFFICERS TO RESTRICT ACCESS TO ANY AREA WHERE A MENACE TO PUBLIC HEALTH OR SAFETY EXISTS DUE TO A CALAMITY SUCH AS FLOOD, STORM, FIRE, EARTHQUAKE, EXPLOSION, ACCIDENT OR OTHER DISASTER. REFUSAL TO COMPLY IS A MISDEMEANOR. (PENAL CODE 409.5)

# **CREATE** A WILDFIRE ACTION PLAN

Your Wildfire Action Plan must be prepared and familiar to all members of your household well in advance of a wildfire. Use the checklist below to help create your plan. Each family's plan will be different, depending on a variety of issues, needs and situations.

### YOUR WILDFIRE ACTION PLAN CHECKLIST:

# Create an evacuation plan that includes:

- A designated emergency meeting location outside the fire or hazard area. This is critical to determine who has safely evacuated from the affected area.
- Several different escape routes from your home and community. Practice these often so everyone in your family is familiar in case of emergency.
- Have an evacuation plan for pets and large animals such as horses and other livestock.
- A family communication plan that designates an out-of-area friend or relative as a point of contact to act as a single source of communication among family members in case of separation. (It is easier to call or message one person and let them contact others than to try and call everyone when phone, cell, and internet systems can be overloaded or limited during a disaster.)

#### **Be Prepared:**

- Have fire extinguishers on hand and train your family how to use them. (Check expiration dates regularly.)
- Ensure that your family knows where your gas, electric, and water main shut-off controls are located and how to safely shut them down in an emergency.
- Assemble an Emergency Supply Kit for each person, as recommended by the American Red Cross. (See next section for details.)
- Maintain a list of emergency contact numbers posted near your phone and in your emergency supply kit.
- Keep an extra emergency supply kit in your car in case you cannot get to your home because of fire or other emergency.
- Have a portable radio or scanner so you can stay updated on the fire.
- Tell your neighbors about Ready, Set, Go! and your Wildfire Action Plan.

# REMEMBER THE SIX "P's" KEEP THESE SIX "P's" READY IN CASE IMMEDIATE EVACUATION IS REQUIRED:

- People and pets
- Papers, phone numbers, & important documents
- Prescriptions, vitamins, and eyeglasses
- Pictures and irreplaceable memorabilia
- Personal computer hard drive and disks
- "Plastic" (credit cards, ATM cards) and cash

# ASSEMBLE AN EMERGENCY SUPPLY KIT

Put together your Emergency Supply Kit long before a wildfire or other disaster occurs and keep it easily accessible so you can take it with you when you have to evacuate. Plan to be away from your home for an extended period of time. Each person should have a readily accessible Emergency Supply Kit. Backpacks work great for storing these items (except food and water) and are quick to grab. Storing food and water in a tub or chest on wheels will make it easier to transport. Keep it light enough to be able to lift it into your car.

#### **Emergency Supply Kit Checklist:**

- Three-day supply of non-perishable food and three gallons of water per person
- Map marked with at least two evacuation routes
- Prescriptions or special medications
- Change of clothing
- Extra eyeglasses or contact lenses
- An extra set of car keys, credit cards, cash or traveler's checks
- First aid kit
- Flashlight
- Battery-powered radio and extra batteries
- Sanitation supplies
- Copies of important documents (birth certificates, passports, etc.)
- Don't forget pet food and water!

#### Items to take if time allows:

- Easily carried valuables
- Family photos and other irreplaceable items
- Personal computer information on hard drives and disks
- Chargers for cell phones, laptops, etc.

#### ALWAYS KEEP A STURDY PAIR OF SHOES AND A FLASHLIGHT NEAR YOUR BED AND HANDY IN CASE OF A SUDDEN EVACUATION AT NIGHT.

FOR MORE INFORMATION ON EMERGENCY SUPPLIES, VISIT WWW.READY.GOV.

# SAVE THIS FAMILY COMMUNICATION PLAN

Fill out this form and place it near your telephone where it can easily be found by everyone in your household. Copy the form and keep it in your Emergency Supply Kits. This will allow all family members to have access to this key information in case you get separated.

### WHEN WE HAVE TO EVACUATE, WE WILL MEET AT:

### **OUR OUT-OF-AREA EMERGENCY CONTACT PERSON IS:**

Name:	Relationship:	
Home Phone #:	Cell Phone #:	
E-mail:		
OTHER IMPORTAI	NT NUMBERS ARE:	
Emergency 911:	Local Police:	
Local Fire Department:	Other:	
Other:	Other:	

### **OUR TWO EVACUATION ROUTES ARE (SKETCH ROUTES BELOW):**

# **READY, SET, GO! PREPARATION GUIDES**

Preparing for a wildfire starts with three simple steps: Ready, Set, Gol Keep all three wildfire preparation guides on hand as a quick reference for helping your family and property be safe in the event of a wildfire.

#### WILDFIRE IS COMING PREPARATION GUIDES:

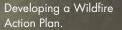


Step 1: Is Your Home Ready?

Creating defensible space and hardening your home against wildfire.



Step 2: Are You Set?





Step 3: Are You Ready to Go?

A quick-reference evacuation guide.



Go to ReadyForWildfire.org for more detailed information on all three guides to prepare for and survive a wildfire.

# WILDFIRE IS COMING. ARE YOU READY TO...

### WILDFIRE EVACUATION GUIDE.



GIVE YOUR FAMILY THE BEST CHANCE OF SURVIVING A WILDFIRE BY EVACUATING EARLY.

**ReadyForWildfire.org** 

### TAKE ACTION IMMEDIATELY WHEN WILDFIRE STRIKES

#### Follow these steps as soon as possible to get ready to Go!

- 1. Review your Evacuation Checklist.
- Ensure your Emergency Supply Kit is in your vehicle.
- **3.** Cover up to protect against heat and flying embers. Wear long pants, long sleeve shirt, heavy shoes/boots, cap, dry bandanna for face cover, goggles or glasses. 100% cotton is preferable.
- 4. Locate your pets and take them with you.

### WHEN TO EVACUATE

#### Leave as soon as evacuation is recommended by fire officials

to avoid being caught in fire, smoke or road congestion. Don't wait to be ordered by authorities to leave. Evacuating early also helps firefighters keep roads clear of congestion, and lets them move more freely to do their job. In an intense wildfire, they may not have time to knock on every door. If you are advised to leave, don't hesitate!

- Officials will determine the areas to be evacuated and escape routes to use depending upon the fire's location, behavior, winds, terrain, etc.
- Law enforcement agencies are typically responsible for enforcing an evacuation order. Follow their directions promptly.
- You will be advised of potential evacuations as early as possible. You must take the initiative to stay informed and aware. Listen to your radio/TV for announcements from law enforcement and emergency personnel.
- You may be directed to temporary assembly areas to await transfer to a safe location.

The terms "Voluntary" and "Mandatory" are used to describe evacuation orders. However, local jurisdictions may use other terminology such as "Precautionary" and "Immediate Threat." These terms are used to alert you to the significance of the danger. All evacuation instructions provided by officials should be followed immediately for your safety.

### WHAT TO DO IF YOU BECOME TRAPPED

#### WHILE IN YOUR VEHICLE:

- Stay calm.
- Park your vehicle in an area clear of vegetation.
- Close all vehicle windows and vents.
- Cover yourself with a wool or cotton blanket or jacket.
- Lie on vehicle floor.
- Use your cell phone to advise officials—Call 911.

#### WHILE ON FOOT:

- Stay calm.
- Go to an area clear of vegetation, a ditch or depression on level ground if possible.
- Lie face down and cover up your body.
- Use your cell phone to advise officials—Call 911.

#### WHILE IN YOUR HOME:

- Stay calm and keep your family together.
- Call 911 and inform authorities of your location.
- Fill sinks and tubs with cold water.
- Keep doors and windows closed, but unlocked.
- Stay inside your house.
- Stay away from outside walls and windows.



### PRE-EVACUATION PREPARATION STEPS

When an evacuation is anticipated, follow these checklists (*if time allows*) to give your home the best chance of surviving a wildfire:

#### OUTSIDE

- 1 Gather up flammable items from the exterior of the house and bring them inside (patio furniture, children's toys, door mats, trash cans, etc.) or place them in your pool. 2 Turn off propane tanks. 3 Move propane BBQ appliances away from structures. 4 Connect garden hoses to outside water valves or spigots for use by firefighters. Fill water buckets and place them around the house. 5 Don't leave sprinklers on or water running; they can affect critical water pressure. 6 Leave exterior lights on so your home is visible to firefighters in the smoke or darkness of night. 7 Put your Emergency Supply Kit in your vehicle. 8 Back your car into the driveway with vehicle loaded and all doors and windows closed. Carry your car keys with you. 9 Have a ladder available and place it at the corner of the house for firefighters to quickly access your roof. 10 Seal attic and ground vents with pre-cut plywood or commercial seals. 1 Monitor your property and the fire situation. Don't wait for an evacuation order if you feel threatened and need to leave.
  - Check on neighbors and make sure they are preparing to leave.

#### **INSIDE THE HOUSE**

- 13 Shut all windows and doors, leaving them unlocked.
  14 Remove flammable window shades and curtains. Close metal shutters.
  15 Move flammable furniture to the center of the room, away from windows and doors.
  16 Shut off gas at the meter. Turn off pilot lights.
  17 Leave your lights on so firefighters can see your house under smoky conditions.
  18 Shut off the air conditioning.
  ANIMALS
  19 Locate your pets and keep them nearby.
  - Prepare farm animals for transport and think about moving them to a safe location early.



# 12 NEIGHBORING PROPERTY

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### KNOW THE LAW BE READY TO EVACUATE

CALIFORNIA LAW AUTHORIZES OFFICERS TO RESTRICT ACCESS TO ANY AREA WHERE A MENACE TO PUBLIC HEALTH OR SAFETY EXISTS DUE TO A CALAMITY SUCH AS FLOOD, STORM, FIRE, EARTHQUAKE, EXPLOSION, ACCIDENT OR OTHER DISASTER. REFUSAL TO COMPLY IS A MISDEMEANOR. (PENAL CODE 409.5)

### HOW TO BE PREPARED BEFORE WILDFIRE STRIKES

#### **DEVELOP AN ACTION PLAN THAT INCLUDES:**

#### Where to Go

Have a safe destination planned. It should be a low-risk area, such as a well-prepared friend's or relative's house, an evacuation center, motel, etc.

#### How To Get There

Plan several travel route options in case one route is blocked by the fire or by emergency vehicles and equipment.

#### What To Take

Assemble your emergency supply kit long before a wildfire or other disaster occurs. Plan to be away from your home for at least three days. Don't forget to plan for your pets or livestock as well.

For more information on preparing your family, pets and property for wildfire see the Ready for Wildfire "Are You Set?" brochure or visit ReadyforWildfire.org/set.

### **RETURNING HOME** AFTER A WILDFIRE

Do not return to your home until fire officials determine it is safe. Notification that it is safe to return home will be given as soon as possible considering safety and accessibility.

#### When you return home:

- Be alert for downed power lines and other hazards.
- Check propane tanks, regulators, and lines before turning gas on.
- Check your residence carefully for hidden embers or smoldering fires.

# READY, SET, GO! PREPARATION GUIDES

Preparing for a wildfire starts with three simple steps: Ready, Set, Go! Keep all three wildfire preparation guides on hand as a quick reference for helping your family and property be safe in the event of a wildfire.

#### WILDFIRE IS COMING PREPARATION GUIDES:

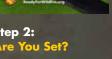


Step 1: Is Your Home Ready?

Creating defensible space and hardening your home against wildfire.



Step 2: Are You Set?



Developing a Wildfire Action Plan.



Step 3: Are You Ready to Go?

A quick-reference evacuation guide.



Go to ReadyForWildfire.org for more detailed information on all three guides to prepare for and survive a wildfire.

# **APPENDIX B-1**

**Emergency Supply List** 

#### Additional Items to Consider Adding to an Emergency Supply Kit:

- Prescription medications and glasses
- Infant formula and diapers
- **Pet food and extra water for your pet**
- Important family documents such as copies of insurance policies, identification and bank account records in a waterproof, portable container
- Cash or traveler's checks and change
- Emergency reference material such as a first aid book or information from www.ready.gov
- □ Sleeping bag or warm blanket for each person. Consider additional bedding if you live in a cold-weather climate.
- Complete change of clothing including a long sleeved shirt, long pants and sturdy shoes. Consider additional clothing if you live in a cold-weather climate.
- Household chlorine bleach and medicine dropper When diluted nine parts water to one part bleach, bleach can be used as a disinfectant. Or in an emergency, you can use it to treat water by using 16 drops of regular household liquid bleach per gallon of water. Do not use scented, color safe or bleaches with added cleaners.
- □ Fire Extinguisher
- Matches in a waterproof container
- Feminine supplies and personal hygiene items
- ☐ Mess kits, paper cups, plates and plastic utensils, paper towels
- Paper and pencil
- Books, games, puzzles or other activities for children



# Emergency Supply List



www.ready.gov



# **Recommended Items to Include in a Basic Emergency Supply Kit:**

Water, one gallon of water per person per day for at least three days, for drinking and sanitation

Food, at least a three-day supply of non-perishable food

Battery-powered or hand crank radio and a NOAA Weather Radio with tone alert and extra batteries for both

Flashlight and extra batteries

First aid kit

Whistle to signal for help

Dust mask, to help filter contaminated air and plastic sheeting and duct tape to shelter-in-place

Moist towelettes, garbage bags and plastic ties for personal sanitation

Wrench or pliers to turn off utilities

Can opener for food (if kit contains canned food)

Local maps

#### Through its Ready Campaign,

the Federal Emergency Management Agency educates and empowers Americans to take some simple steps to prepare for and respond to potential emergencies, including natural disasters and terrorist attacks. *Ready* asks individuals to do three key things: get an emergency supply kit, make a family emergency plan, and be informed about the different types of emergencies that could occur and their appropriate responses.

All Americans should have some basic supplies on hand in order to survive for at least three days if an emergency occurs. Following is a listing of some basic items that every emergency supply kit should include. However, it is important that individuals review this list and consider where they live and the unique needs of their family in order to create an emergency supply kit that will meet these needs. Individuals should also consider having at least two emergency supply kits, one full kit at home and smaller portable kits in their workplace, vehicle or other places they spend time.



Federal Emergency Management Agency Washington, DC 20472

# **APPENDIX B-2**

# Family Emergency Communication Plan Kit



# BE SMART. TAKE PART. CREATE YOUR FAMILY EMERGENCY COMMUNICATION PLAN

# Join with others to prepare for emergencies and participate in America's PrepareAthon! | ready.gov/prepare

Creating your Family Emergency Communication Plan starts with one simple question: "What if?"

"What if something happens and I'm not with my family?" "Will I be able to reach them?" "How will I know they are safe?" "How can I let them know I'm OK?" During a disaster, you will need to send and receive information from your family.

Communication networks, such as mobile phones and computers, could be unreliable during disasters, and electricity could be disrupted. Planning in advance will help ensure that all the members of your household—including children and people with disabilities and others with access and functional needs, as well as outside caregivers—know how to reach each other and where to meet up in an emergency. Planning starts with three easy steps:



### **1. COLLECT.**

Create a paper copy of the contact information for your family and other important people/offices, such as medical facilities, doctors, schools, or service providers.



# 2. SHARE.

Make sure everyone carries a copy in his or her backpack, purse, or wallet. If you complete your *Family Emergency Communication Plan* online at <u>ready.gov/make-a-plan</u>, you can print it onto a wallet-sized card. You should also post a copy in a central location in your home, such as your refrigerator or family bulletin board.



## **3. PRACTICE.**

Have regular household meetings to review and practice your plan.



If you are using a mobile phone, a text message may get through when a phone call will not. This is because a text message requires far less bandwidth than a phone call. Text messages may also save and then send automatically as soon as capacity becomes available.



#### **HOUSEHOLD INFORMATION**

Write down phone numbers and email addresses for everyone in your household. Having this important information written down will help you reconnect with others in case you don't have your mobile device or computer with you or if the battery runs down. If you have a household member(s) who is Deaf or hard of hearing, or who has a speech disability and uses traditional or video relay service (VRS), include information on how to connect through relay services on a landline phone, mobile device, or computer.

#### SCHOOL, CHILDCARE, CAREGIVER, AND WORKPLACE EMERGENCY PLANS

Because a disaster can strike during school or work hours, you need to know their emergency response plans and how to stay informed. Discuss these plans with children, and let them know who could pick them up in an emergency. Make sure your household members with phones are signed up for alerts and warnings from their school, workplace, and/or local government. To find out more about how to sign up, see *Be Smart. Know Your Alerts and Warnings* at http://1.usa.gov/1BDloze. For children without mobile phones, make sure they know to follow instructions from a responsible adult, such as a teacher or principal.

#### **OUT-OF-TOWN CONTACT**

It is also important to identify someone outside of your community or State who can act as a central point of contact to help your household reconnect. In a disaster, it may be easier to make a long-distance phone call than to call across town because local phone lines can be jammed.

#### **EMERGENCY MEETING PLACES**

Decide on safe, familiar places where your family can go for protection or to reunite. Make sure these locations are accessible for household members with disabilities or access and functional needs. If you have pets or service animals, think about animal-friendly locations. Identify the following places:

*Indoor*: If you live in an area where tornadoes, hurricanes, or other high-wind storms can happen, make sure everyone knows where to go for protection. This could be a small, interior, windowless room, such as a closet or bathroom, on the lowest level of a sturdy building, or a tornado safe room or storm shelter.

*In your neighborhood*: This is a place in your neighborhood where your household members will meet if there is a fire or other emergency and you need to leave your home. The meeting place could be a big tree, a mailbox at the end of the driveway, or a neighbor's house.

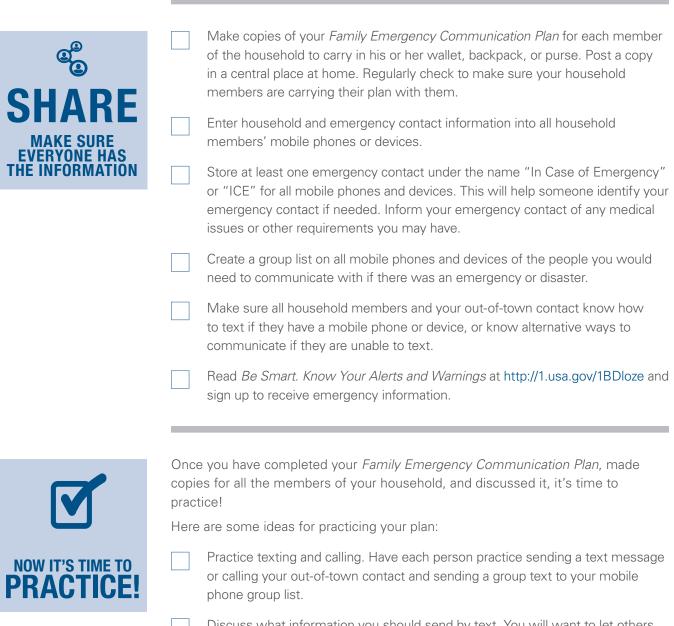
*Outside of your neighborhood*: This is a place where your family will meet if a disaster happens when you're not at home and you can't get back to your home. This could be a library, community center, house of worship, or family friend's home. *Outside of your town or city*: Having an out-of-town meeting place can help you reunite if a disaster happens and:

- You cannot get home or to your out-of-neighborhood meeting place; or
- Your family is not together and your community is instructed to evacuate the area.

This meeting place could be the home of a relative or family friend. Make sure everyone knows the address of the meeting place and discuss ways you would get there.

#### **OTHER IMPORTANT NUMBERS AND INFORMATION**

You should also write down phone numbers for emergency services, utilities, service providers, medical providers, veterinarians, insurance companies, and other services.



Discuss what information you should send by text. You will want to let others know you are safe and where you are. Short messages like "I'm OK. At library" are good.

	Talk about who will be the lead person to send out information about the designated meeting place for the household.
	Practice gathering all household members at your indoor and neighborhood emergency meeting places. Talk about how each person would get to the identified out-of-neighborhood and out-of-town meeting places. Discuss all modes of transportation, such as public transportation, rail, and para-transit for all family members, including people with disabilities and others with access and functional needs.
	Regularly have conversations with household members and friends about the plan, such as whom and how to text or call, and where to go.
	To show why it's important to keep phone numbers written down, challenge your household members to recite important phone numbers from memory— now ask them to think about doing this in the event of an emergency.
	Make sure everyone, including children, knows how and when to call 911 for help. You should only call 911 when there is a life-threatening emergency.
	Review, update, and practice your <i>Family Emergency Communication Plan</i> at least once a year, or whenever any of your information changes.
steps <i>It Sta</i> www	elp start the conversation or remind your family why you are taking s to prepare and practice, you may want to watch the 4-minute video, <i>arted Like Any Other Day</i> , about families who have experienced disaster, at v.youtube.com/watch?v=w_omgt3MEBs. Click on the closed captioning (CC) on the lower right to turn on the captioning.
impro	you practice, talk about how it went. What worked well? What can be oved? What information, if any, needs to be updated? If you make updates, ember to print new copies of the plan for everyone.
ОТН	ER IMPORTANT TIPS FOR COMMUNICATING IN DISASTERS <sup>1</sup>
	Text is best when using a mobile phone, but if you make a phone call, keep it brief and convey only vital information to emergency personnel and/or family or household members. This will minimize network congestion, free up space on the network for emergency communications, and conserve battery power. Wait 10 seconds before redialing a number. If you redial too quickly, the data from the handset to the cell sites do not have enough time to clear before you've re-sent the same data. This contributes to a clogged network.
	Conserve your mobile phone battery by reducing the brightness of your screen, placing your phone in airplane mode, and closing apps you do not need. Limit watching videos and playing video games to help reduce network congestion.

Keep charged batteries, a car phone charger, and a solar charger available for backup power for your mobile phone, teletypewriters (TTYs), amplified phones, and caption phones. If you charge your phone in your car, be sure the car is in a well-ventilated area (e.g., not in a closed garage) to avoid life-threatening carbon monoxide poisoning.

If driving, do not text, read texts, or make a call without a hands-free device.
Maintain a household landline and analog phone (with battery backup if it has a cordless receiver) that can be used when mobile phone service is unavailable. Those who are Deaf or hard of hearing, or who have speech disabilities and use devices and services that depend on digital technology (e.g., VRS, Internet Protocol [IP] Relay, or captioning) should have an analog phone (e.g., TTY, amplified phone, or caption phone) with battery backup in case Internet or mobile service is down.
If you evacuate and have a call-forwarding feature on your home phone, forward your home phone number to your mobile phone number.
Use the Internet to communicate by email, Twitter, Facebook, and other social media networks. These communication channels allow you to share information quickly with a widespread audience or to find out if loved ones are OK. The Internet can also be used for telephone calls through Voice over Internet Protocol. For those who are Deaf or hard of hearing, or who have speech disabilities, you can make calls through your IP Relay provider.
If you do not have a mobile phone, keep a prepaid phone card to use if needed during or after a disaster.
Use a pay phone if available. It may have less congestion because these phones don't rely on electricity or mobile networks. In some public places, you may be able to find a TTY that can be used by those who are Deaf or hard of hearing, or who have speech disabilities.

#### America's PrepareAthon! is a grassroots campaign for action to get more people prepared for emergencies. Make your actions count at ready.gov/prepare.

The reader recognizes that the Federal Government provides links and informational data on various disaster preparedness resources and events and does not endorse any non-Federal events, entities, organizations, services, or products.



### FAMILY EMERGENCY COMMUNICATION PLAN

HOUSEHOLD INFORMATION

Home #: Address:
Name:
Name:
Name:
Name: Mobile #: Other # or social media: Email: Important medical or other information:
Name: Address: Emergency/Hotline #: Website: Emergency Plan/Pick-Up:

SCHOOL, CHILDCARE,

CAREGIVER, AND WORKPLACE

**EMERGENCY PLANS** 

SCHOOL, CHILDCARE, CAREGIVER, AND WORKPLACE EMERGENCY PLANS	Name: Address: Emergency/Hotline #: Website: Emergency Plan/Pick-Up:
	Name: Address: Emergency/Hotline #: Website: Emergency Plan/Pick-Up:
	Name: Address: Emergency/Hotline #: Website: Emergency Plan/Pick-Up:
IN CASE OF EMERGENCY (ICE) CONTACT	Name:
OUT-OF-TOWN Contact	Name:
EMERGENCY MEETING PLACES	Indoor: Instructions: Neighborhood: Instructions:
	Out-of-Neighborhood: Address: Instructions:
	Out-of-Town: Address: Instructions:

#### IMPORTANT NUMBERS OR INFORMATION

Police:	Dial 911 c	or #:	
Fire:	Dial 911 d	or #:	
Poison Control:		#:	
Doctor:		#:	
Doctor:		#:	
Pediatrician:		#:	
Dentist:		#:	
Hospital/Clinic:		#:	
Pharmacy:		#: .	
Medical Insurance:		#:	
Policy #:			
Medical Insurance:		#:	
Policy #:			
Homeowner/Rental	Insurance	e:	
#:			
Policy #:			
Flood Insurance:		#:	
Policy #:			
Veterinarian:		#:	
Kennel:		#:	
Electric Company: .		#:	
Gas Company:		#:	
Water Company:		#:	
Alternate/Accessible	e Transpor	rtatio	n:
#:			
Other:		#:	
Other:		#:	
Other:		#:	

# **APPENDIX B-3**

Family Emergency Communication Plan Cards

r — — — — — — — — — — — — — — — — — — —		IN CASE OF EMERGENCY (ICE) CONTACT	
	i i	Name:	
AMERICA'S	i i	Home #:	
PrepareAthon! Ready		Address:	
BE SMART. TAKE PART. PREPARE.			
	i i	OUT-OF-TOWN CONTACT	
	i i	Name:	
Write your family's name above		Home #:	
Family Emergency Communication Plan		Address:	
· · · · · · · · · · · · · · · · · · ·	+ <fold HERE&gt;</fold 		
HOUSEHOLD INFORMATION	I I	EMERGENCY MEETING PLACES	
Home #:	i i		
Address:	i i	Indoor:	
Name:Mobile #:	1 1	Instructions:	
Other # or social media: Email:	1 1		
I Important medical or other information:	1 1		
l de la construcción de	i i	Neighborhood:	
Name:Nobile #:		Instructions:	
Other # or social media: Email:			
Important medical or other information	<pre>FOLD HERE</pre>		
	HERE		
Name:	i i	Out-of-Neighborhood:	
Other # or social media: Email:	1 1	Address:	
	1 1	Instructions:	
Important medical or other information:	i i		
1	1 1		
Name:Mobile #:	1 1	Out-of-Town:	
Other # or social media: Email:	1 1	Address:	
Important medical or other information:		Instructions:	
1			
SCHOOL CHILDCARE , CAREGIVER, AND WORKPLACE EMERGENCY PLANS	<pre>FOLD HERE</pre>	IMPORTANT NUMBERS OR INFORMATION	
Name:		Police:Dial 911 or #:	
Address:	1	Fire:Dial 911 or #:	
Emergency/Hotline #:	i i	Poison Control:#: Doctor: #:	
Emergency Plan/Pick-Up:	1 1	Doctor:#:	
		Pediatrician:#:	
Name:	1	Dentist:#:	
Address:	i 1	Policy #:	
I Emergency/Hotline #:Website:	1 1	Medical Insurance:#:	
I I Emergency Plan/Pick-Up:	1	Policy #: Hospital/Clinic:#:	
	<pre>FOLD HERE</pre>		
Name:	1 1	Pharmacy:#:	
Address:	1 1	Homeowner/Rental Insurance:#:#: Policy #:	
Emergency/Hotline #:Website:	1	Flood Insurance:#:	
Emergency Plan/Pick-Up:	į į	Policy #: Veterinarian:	
		Veterinarian:#: Kennel:#:	
Name:		Electric Company:#:	
Address:		Gas Company:#:	
Emergency/Hotline #:Website:	į i	Water Company:#:#:	
Emergency Plan/Pick-Up:		Other:	
I •		Other:	

# **APPENDIX B-4**

### Sample Family Disaster Plan



#### **Family Disaster Plan**

Family Last Name(s) or Household Address:			Date:
Family Member/Household Co	ontact Info (If needed, a	dditional space is provid	ed in #10 below):
Name	Home Phone	Cell Phone	<u>Email</u> :
Pet(s) Info:			
<u>Name:</u>	<u>Түре:</u>	<u>Color:</u>	Registration #:

#### **Plan of Action**

1. The disasters most likely to affect our household are:

2. What are the escape routes from our home?

3. If separated during an emergency, what is our meeting place near our home?

4. If we cannot return home or are asked to evacuate, what is our meeting place outside of our neighborhood?

5. In the event our household is separated or unable to communicate with each other, our emergency contact outside of our immediate area is:

<u>Name</u>	<u>Home Phone</u>	<u>Cell Phone</u>	<u>Email</u> :

After a disaster, let your friends and family know you are okay by registering at "Safe and Well" at <u>https://safeandwell.communityos.org/cms//</u> or by calling 1-800-733-2767. You can also give them a call, send a quick text or update your status on social networking sites.

6. If at school/daycare, our child(ren) will be evacuated to:

Child's Name:	Evacuation Site (address and contact info):
7. Our plan for people in our he	ousehold with a disability or special need is:
Person's Name:	<u>Plan:</u>

8. During certain emergencies local authorities may direct us to "shelter in place" in our home. An accessible, safe room where we can go, seal windows, vents and doors and listen to emergency broadcasts for instructions, is:

9. Family Member Responsibilities in the Event of a Disaster

Task	Description	Family Member Responsible
Disaster Kit*	Stock the disaster kit and take it if evacuation is necessary. Include items you might want to take to an evacuation shelter. Remember to include medications and eye glasses.	
Be informed	Maintain access to NOAA or local radio, TV, email or text alerts for important and current information about disasters.	
Family Medical Information	Make sure the household medical information is taken with us if evacuation is necessary.	
Financial Information	Obtain copies of bank statements and cash in the event ATMs and credit cards do not work due to power outages. Bring copies of utility bills as proof of residence in applying for assistance.	
Pet Information	Evacuate our pet(s), keep a phone list of pet-friendly motels and animal shelters, and assemble and take the pet disaster kit.	
Sharing and Maintaining the Plan	Share the completed plan with those who need to know. Meet with household members every 6 months or as needs change to update household plan.	

\*What supplies and records should go in your disaster kit? Visit <u>www.redcross.org</u>

10. Other information, if not able to be included above.

Congratulations on completing your family disaster plan! Please tell others: "We've made a family disaster plan and you can, too, with help from the American Red Cross."

Get the facts about what you should do if an emergency or disaster occurs at <u>www.redcross.org</u>