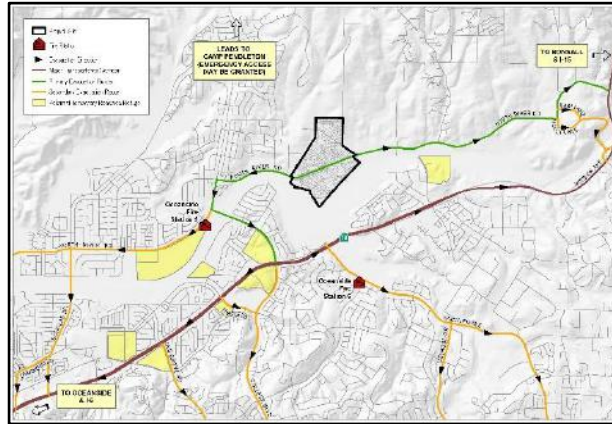


APPENDIX J2

Evacuation Plan

DRAFT

Conceptual Wildland Fire Evacuation Plan for the North River Farms Community



Prepared for:

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June 2018

Draft Conceptual Wildland Fire Evacuation Plan for The North River Farms Community

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1 QUICK REFERENCE – CONCEPTUAL WILDLAND FIRE EVACUATION PLAN

NOTE: Pages 1 through 10 are the focus of the homeowner evacuation educational outreach efforts. These pages will be available on the community’s Homeowner’s Association (HOA) Website and provided to each homeowner at change of property ownership. The remainder of this evacuation plan provides more detailed analysis and background information intended for review by emergency management agencies, including this plan’s consistency with Oceanside’s Emergency Plan and standard San Diego County Office of Emergency Services evacuation planning.

Figure 1 is the North River Farms community map and Figure 2 displays the Emergency Evacuation Routes available to the North River Farms Community. Figure 2 highlights the community’s interior roads along with primary access points and primary roads and major traffic corridors leading to off-site areas.

The available evacuation routes, potential wildfire exposure, and contingency refuge areas along evacuation routes for the residents and guests of the North River Farms project are detailed below and in Figure 2. *Residents 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 east/northeast via North River Road** – North River Road is the primary North River Farms Community access road and one of the primary North River Farms evacuation routes and connects to the east/northeast with State Route 76 (SR-76), which offers travel to the east with options for southerly and northerly travel, eventually connecting with Interstate 15 (I-15).
 - a. **Wildland Fire Exposure Rating: Moderate.** Exposure along North River Road is limited to primarily flashy fuels/grass, agricultural fields, and maintained landscapes. Natural vegetation occurs within the San Luis Rey River south and east of North River Road, but terrain is favorable and would facilitate fire spread away from the road and would be medium duration.
 - b. **Potential Temporary Roadside Refuge:** Agricultural fields off North River Road.
2. **Egress to the west and south via North River Road and College Boulevard** – North River Road connects to the west/southwest with College Boulevard (1.3 miles west of North River Road) which offers travel to the west to SR-76 into Oceanside and the coastal cities, eventually connecting with I-5.

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- a. **Wildland Fire Exposure Rating: Low.** Exposure along North River Road is limited to residential communities and maintained landscapes. Natural vegetation occurs within the San Luis Rey River south and west of North River Road, but terrain is favorable and would facilitate fire spread away from the road with a short duration.
 - b. **Potential Temporary Roadside Refuge:** Within the Mission Marketplace, the Walmart Superstore parking lot, and 24-Hour Fitness Parking lot.
3. **Egress to the west and south via North River Road and Douglas Drive** – North River Road connects to the west/southwest with Douglas Drive (approximately 2.75 miles southwest of North River Road), which offers travel to the west to SR-76 into Oceanside and the coastal cities or south to Oceanside Boulevard and eventually SR-78 via El Camino Real (1.6 miles from intersection of SR-76 and El Camino Real to Oceanside Boulevard and 3.0 miles to SR-78).
- a. **Wildland Fire Exposure Rating: Low.** The road includes very minimal exposure to wildland fuels. This exposure would be limited in extent due to favorable terrain, short burn duration, and wind alignment, which places fuels to the south of the road.
 - b. **Potential Temporary Roadside Refuge:** Shopping center parking lots, and potentially within residential communities and urban areas along El Camino Real.

These evacuation routes would be available to North River Farms and other area residents during an evacuation that enabled adequate time where fire was not in the immediate area or encroaching on the roadways. 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 are available to the North River Farms Community.

1.1 Nearest Medical Facilities

Scripps Coastal Medical Center (3.8 miles)

4318 Mission Avenue
Oceanside, California 92057

Directions:

- North River Road (southwest) then left onto North River Road / Vandegrift Boulevard

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- First left onto College Boulevard
- First right onto CA-76 / Mission Avenue
- Stay on CA-76 / Mission Avenue for 1.6 miles then turn left onto Old Grove Road
- First right onto Mission Avenue
- Hospital on Right

Tri-City Medical Center (7.1 miles)

4002 Vista Way
Oceanside, California 92056

Directions:

- North River Road (southwest) then left onto North River Road / Vandegrift Boulevard
- First left onto College Boulevard
- Continue on College Boulevard for 5.4 miles and turn onto Vista Way
- Hospital on Left

Naval Hospital Camp Pendleton (7.6 miles)

200 Mercy Circle
Oceanside, California 92055

Directions:

- North River Road (southwest) then left onto North River Road / Vandegrift Boulevard
- First left onto College Boulevard
- First right onto Hwy 76 / San Luis Rey Mission Expressway
- Stay on Hwy 76 for 6.1 miles then turn left onto Interstate 5
- Take Interstate 5 to Marine Corps Base Camp Pendleton exit
- After passing through the main gate of the Base, continue on Vandegrift Blvd. for 0.6 miles.
- Hospital is located on the right side off of Mercy Circle.

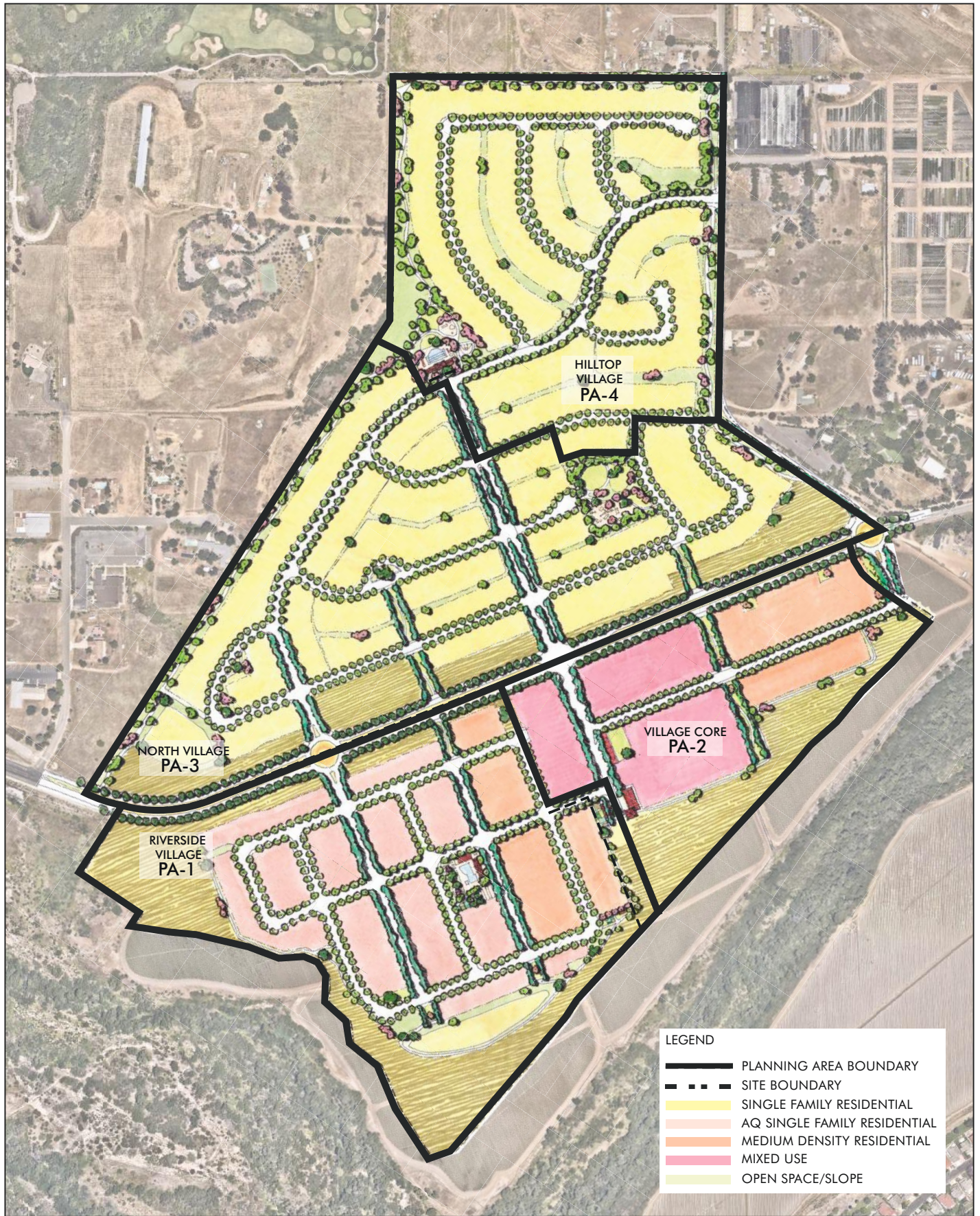
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See also Local Urgent Care facilities, including:

Action Urgent Care
845 College Boulevard
Oceanside, California 92057

8-2-8 Urgent Care
4171 Oceanside Boulevard, Suite 109
Oceanside, California 92056

Z:\Projects\11079801\MAPDOC\MAPS\FPP Figs



SOURCE: SWA 2017

0 200 400
1 inch = 200 feet

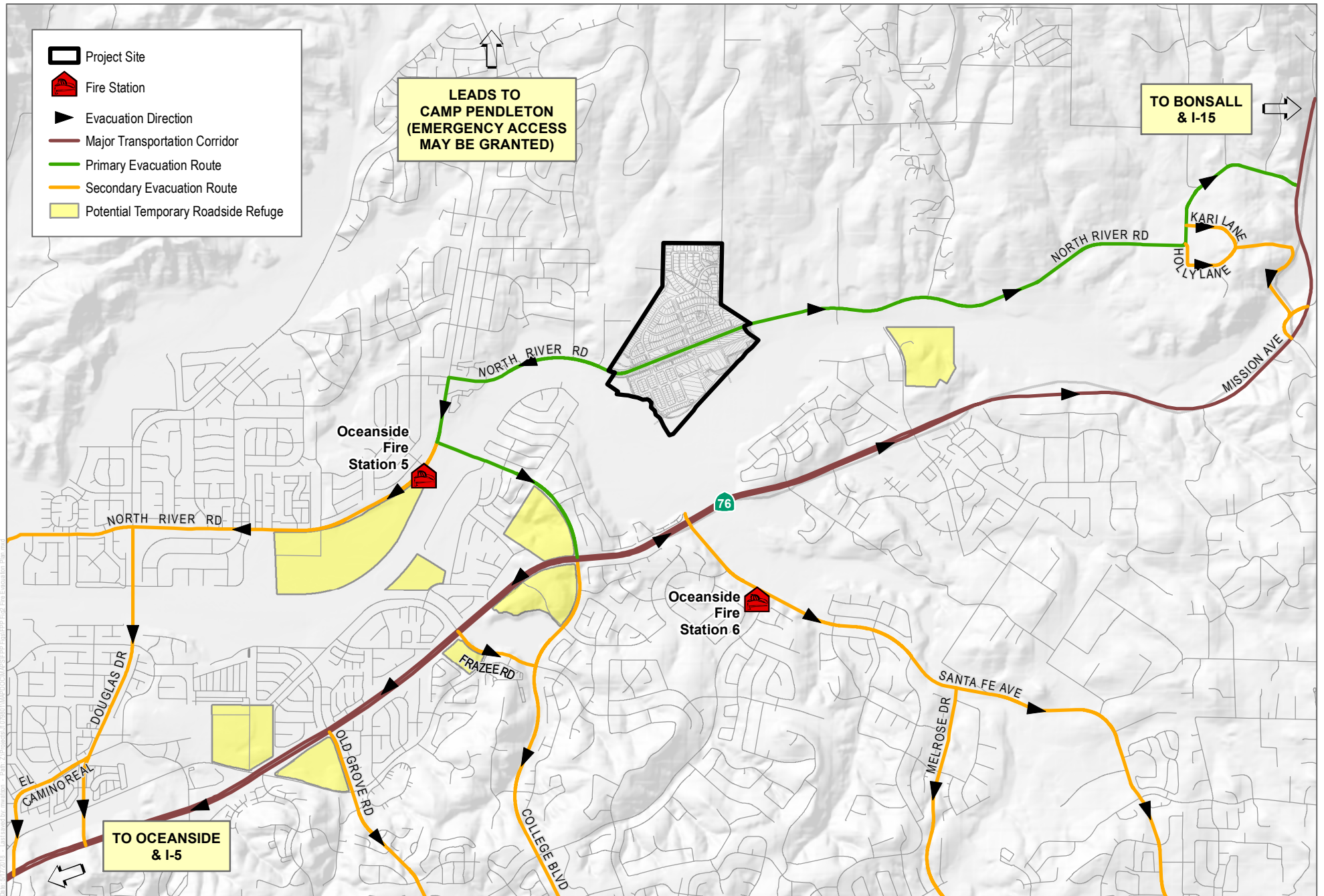
DUDEK

FIGURE 1
Site Plan

Fire Protection Plan for the North River Farms Project

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SOURCE: SANDAG 2018; ESRI 2018

FIGURE 2
The North River Farms Fire Evacuation Map
 Wildland Fire Evacuation Plan for The North River Farms Project

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1.2 Register to Receive Emergency Alerts

The City of Oceanside utilizes a Reverse 911 system provided by the County of San Diego and known as AlertSanDiego for its Community 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 proximity of the North River Farms Community, the Incident Commander (IC) will contact the Oceanside Police Department and other law enforcement agencies that may be needed to support an emergency situation (San Diego County Sheriff's Office (SDSD) and California Highway Patrol). The OPD's or SDSD's communications center has the responsibility to request activation of the AlertSanDiego system and release an emergency notification to the affected population. Therefore, the North River Farms community residents are strongly advised to register their landlines, mobile phone numbers and email addresses with Reverse 9-1-1, AlertSanDiego system (<http://www.readysandiego.org/AlertSanDiego/>) in order to receive emergency evacuation instructions.

The North River Farms community 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 provided coverage and information is disseminated guiding resident 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 City of Oceanside provides residents with wildfire and evacuation information by subscribing to the City's e-alerts and Facebook and twitter pages (<http://www.ci.oceanside.ca.us/gov/police/alerts.asp>). Additional news outlets:

- Oceanside's KOCT TV: <https://www.koct.org/>
- CityTV is another news sources available during an emergency and can be found online (http://granicus.sandiego.gov/MediaPlayer.php?publish_id=1648) or:
- Channel 19 – Cox Communications
- Channel 24 – Time Warner Cable
- Channel 99 – AT&T

1.3 Get Involved in Community Readiness

North River Farms residents are encouraged to form a volunteer Neighborhood Emergency Response Team through the Community Emergency Response Team (CERT) program (<https://www.oceansidecert.org/>). In addition, the community HOA will organize annual evacuation public outreach, engage directly with organizations such as Fire Safe Council of San

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Diego County, as well as maintain a fire safe page on the community Web page, including this Emergency Evacuation Plan and links to important citizen preparedness information.

This evacuation plan is prepared specifically for the North River Farms Community and focuses on wildland fire evacuations, although many of the concepts and protocols will be applicable to other emergency situations. Ultimately, this plan will be used by the North River Farms HOA to educate community residents as to their evacuation approach during wildfires and other similar emergencies. It is important for the North River Farms residents to understand the importance of being prepared, so if/when the time comes where evacuation is necessary, they will be able to systematically implement their evacuation plan. Some actions the community residents can complete in advance include:

- Follow the “Ready, Set, Go!” model developed for wildfire evacuations.
 - Create an escape plan from the residence, as well as familiarity with escape routes out of the area.
 - Create a car emergency kit, including cell phone charger, flashlight, jumper cables, water, and food.
 - Gather important paperwork, including birth and marriage certificates, account documents, passports, Social Security cards, and any other important documents.
 - As time allows, make sure to secure your home by locking all doors and windows, and unplugging electrical equipment, such as appliances and electronics.

Sample emergency preparedness resources available to the North River Farms residents are provided in Appendix A (“Ready, Set, Go!” Wildland Fire Action Guide) and Appendices B-1 and B-2 (Family Disaster Plan and Checklists), and residents are encouraged to become familiar with the concepts detailed at the following Websites:

1. Emergency Plan for the City of Oceanside:
<http://www.ci.oceanside.ca.us/civicax/filebank/blobdload.aspx?blobid=31899>
2. “Ready, Set, Go!” Wildland Fire Action Guide:
<https://www.sandiego.gov/sites/default/files/rsg-english.pdf>
3. Red Cross Emergency Planning:
<http://www.redcross.org/get-help/how-to-prepare-for-emergencies/make-a-plan>
4. Hazardous Materials Emergency Preparedness:
<https://www.ready.gov/hazardous-materials-incidents>

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5. Building a disaster kit:

<http://www.redcross.org/get-help/prepare-for-emergencies/be-red-cross-ready/get-a-kit>

6. Making a Plan Checklist:

<https://www.ready.gov/make-a-plan>

7. Family Communication Plan:

https://www.fema.gov/media-library-data/1440449346150-1ff18127345615d8b7e1effb4752b668/Family_Comm_Plan_508_20150820.pdf

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 North River Farms Conceptual Wildland Fire Evacuation Plan (CWFEP) has been prepared based on the City of Oceanside (City) Emergency Operations Procedures, which closely follows the Unified San Diego County Emergency Services Organization and County of San Diego Operational Area Emergency Operations Plan (EOP), including its Evacuation Annex.

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 2014). 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 City's Police Department or Fire Department, SDSO, 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, OPD, SDSO, City of Oceanside Fire Department (OFD), 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 high when evacuees are evacuating late, and fire encroachment is imminent. 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

Draft Conceptual Wildland Fire Evacuation Plan for The North River Farms Community

public, and take a very conservative approach to evacuation decision timelines as well as providing contingency plans.

Equally as 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 CWFEP 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 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 northern San Diego region. This North River Farms CWFEP is consistent with the County's and City'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 (OFD, OPD, OES, SDSO, 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.

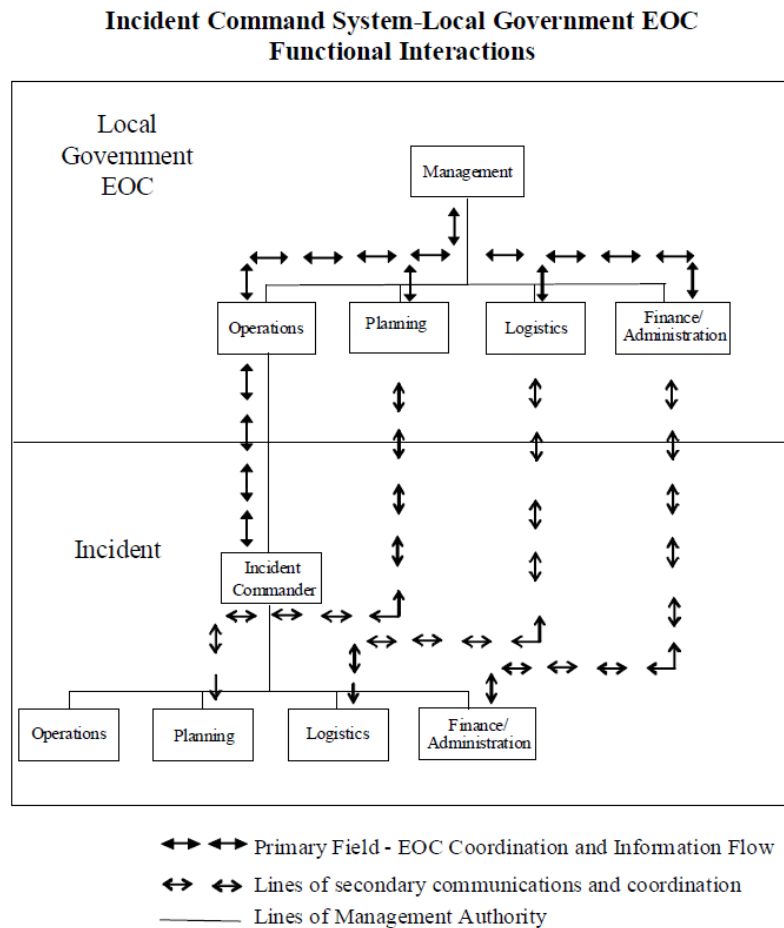
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3 SAN DIEGO COUNTY EVACUATION PLANNING SUMMARY

This CWFEP incorporates concepts and protocols practiced throughout San Diego County that have been adopted by Oceanside’s Fire Department. The San Diego County Evacuation Annex Q (2014) 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 3 summarizes the functional interactions of local government EOC under the Incident Command System.

Figure 3 Incident Command System-Local Government EOC Functional Interactions



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During an evacuation effort, the designated County Evacuation Coordinator is the OPD or SDCSD, who are 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:

- Oceanside Police Department (OPD)
- County of San Diego Sheriff's Department
- Oceanside Fire Department
- American Red Cross
- County Health and Human Services Agency
- San Diego Humane Society
- San Diego County Department of Animal Services,
- Department of Planning and Development Services
- Department of Environmental Health
- Department of General Services
- Department of Public Works
- Department of Agriculture, Weights, and Measures
- 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 and is consistent with the City's Emergency Operations Procedures (EOP):

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;

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- 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 OPD or SDCSD is the lead agency for evacuations of areas within the City, including the North River Farms project. The OPD, 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 OPD identifies available and appropriate evacuation routes and coordinate evacuation traffic management with the California Department of Transportation (Caltrans), the CHP, the San Diego County Sheriff's Department (SDSD), 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 City, the decision to evacuate will be made at the local jurisdiction level with regional collaboration considerations.
 - a. Based on the information gathered, local jurisdictions will generally make the determination on whether to evacuate communities as the need arises, on a case-by-case scenario 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).

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- 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.
- 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 residents time

Draft Conceptual Wildland Fire Evacuation Plan for The North River Farms Community

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 OPD or IC implements an evacuation order, they coordinate with the responding fire agency (e.g., OFD), the EOC, and others to decide on a location to use as a Temporary Evacuation Point (TEP). The City's Police Department Communication Division will utilize the AlertSanDiego system, will notify local television and radio stations, and the City 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 Red Cross facilities and serve as temporary safe zones for evacuees and will provide basic needs such as food, water, and restrooms. In addition to designated shelters, other points of temporary refuge should be large, well known sites such as shopping centers and libraries. Possible shelters and assembly areas that could (subject to OPD) provide at least short-term refuge:

- Mission Marketplace Shopping Center at 427 College Boulevard in Oceanside
- Town Center North Shopping Center at 815 College Boulevard in Oceanside
- 24 Hour Fitness Center and Parking lot at 4655 Frazee Road in Oceanside
- Mission Vista High School at 1306 Melrose Drive in Oceanside

Other refuge sites are available within urbanized areas of Carlsbad, El Cajon, Escondido, Fallbrook, Oceanside, San Marcos, Temecula, and Vista, and developed communities primarily to the south, west, and east of the North River Farms community. Potential evacuation shelters and assembly areas¹ that could provide a longer stay for refuge are:

- Pala Casino Resort and Spa at 11154 Hwy 76 in Pala
- Great Oak High School at 32555 Deer Hollow Way in Temecula
- Fallbrook High School at 2400 S. Stage Coach Lane in Fallbrook
- East Valley Community Center at 2245 E. Valley Parkway in Escondido
- Bostonia Park and Recreation Center at 1049 Bostonia Street in El Cajon

¹ These evacuation centers were activated during the 2017 Lilac Fire (County of San Diego 2018).

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- Oceanside High School at 1 Pirates Cove Way in Oceanside
- Palomar College at 1140 West Mission Road in San Marcos
- Stagecoach Community Park at 3420 Camino de los Coches in Carlsbad

If there are residents unable to evacuate and need transportation assistance to get to a TEP or shelter, the OPD 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. Additional North River Farms 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.

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The decision on whether to evacuate or shelter-in-place is carefully considered with the timing and nature of the incident (San Diego County 2014). 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. Like most new master planned communities incorporating ignition resistant construction, fuel modification zones, and providing defensibility throughout, responding fire and law enforcement personnel will be able to direct residents to temporarily refuge in their homes at the North River Farms Community, in the event that sheltering is determined to be safer than evacuating.

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4 THE NORTH RIVER FARMS EVACUATION ROAD NETWORK

Wildfire emergencies that would be most likely to include an evacuation of the North River Farms community would be large wildfires approaching through the San Luis Rey Riverbed from the east or from large wildfires approaching from the north/northeast with potential to spot into the project. These fires are often wind driven and occur during declared Red Flag Warning periods where low humidity and high winds facilitate fire ignition and spread. If a wildfire ignites within the San Luis Rey Riverbed and is fanned by fire weather conditions, an early evacuation of the area may occur as many as several or more hours prior to actual threatening conditions at the North River Farms site. Fires occurring on typical weather days have been very successfully controlled at small sizes due to the slower fire spread and fast response and would not typically trigger a need to evacuate the project.

If a wildfire ignited closer to the North River Farms community during weather that facilitates rapid fire spread, a different evacuation approach would need to be considered. Because it is preferred to evacuate long before a wildfire is near, and in fact, history indicates that most human fatalities from wildfires are due to late evacuations when evacuees are overtaken on roads, it is prudent to consider a contingency option. For example, if a wildfire is anticipated to encroach upon the community in a timeframe that is shorter than would be required to evacuate all residents, then options available to responding fire and law enforcement personnel should include 1) partial relocation where residents in perimeter homes are temporarily relocated to internal areas or nearby developed areas, or 2) temporary refuge where residents are instructed to remain in their protected homes while firefighters perform their structure protection function.

The Project site is located within an area that is subject to occasional wildfires, but based on the agricultural uses on the north, south, and east and developed areas to the west, the wildfire potential is considered reduced. Similarly, fire intensity would be expected to be moderate to low in areas outside of the San Luis Rey River channel. 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.

This approach is consistent with San Diego County's (2014) Evacuation approach which states "*Due to the nature of the threats requiring an evacuation, there may be insufficient time to perform an early evacuation of the area and shelter-in-place instructions may need to be provided.*" Although not a designated shelter-in-place community, the structures in the North River Farms Community include the same level of ignition resistance and landscape maintenance and are defensible against the short duration wildfire exposure anticipated and they are designed to require minimal resources for protection, which enables these contingency options that may not be available to other vicinity communities.

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The North River Farms roads and adjacent road circulatory system will be consistent with other new communities in their ability to effectively handle 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 in urban settings 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 communities in the area, including North River Farms, will offer its residents a high level of fire safety on site (refer to the North River Farms Fire Protection Plan prepared by Dudek, 2018), along with options for firefighter safety zones and temporary on-site refuge as a contingency, as discussed further in this plan.

The North River Farms planned community interior road network and the existing regional road system that it interconnects provide multi-directional primary and secondary emergency evacuation routes consistent with most communities in this area. Consistent with County of San Diego evacuation planning annex (2014), 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 North River Farms are North River Road, College Boulevard, SR-76, Douglas Drive, and El Camino Real. These roads provide access to urbanized areas and major traffic corridors including indirectly to I-5, I-15, and SR-78.

During an emergency evacuation from the North River Farms community, the primary and secondary roadways may be providing citizen egress while responding emergency vehicles are inbound. Because the roadways are all designed to meet or exceed County of San Diego Consolidated Fire Code or City of Oceanside requirements, including 12-foot-wide, unobstructed travel lanes, shoulders, adequate parking, turning radius, grade maximums, signals at

Draft Conceptual Wildland Fire Evacuation Plan for The North River Farms Community

intersections, and roadside fuel modification zones, potential conflicts that could reduce the roadway efficiency are minimized, allowing for smooth evacuations. Improvements to North River Road provided by the Project provides additional benefits during an evacuation.

The North River Farms Community's primary evacuation routes are accessed through a series of internal neighborhood roadways, which connect with the primary ingress/egress roads (North River Road and Wilshire Road) that intersect off-site primary and major evacuation routes. Based on the existing road network, the community can evacuate to the north and south (once off site), east and/or west depending on the nature of the emergency.

There are three primary ingress/egress routes for the North River Farms Community:

Primary Ingress/Egress

- Eastern Primary Route 1: North River Road to SR-76 to the east/northeast, central and eastern portions of the northern and southern development areas.
- Western Primary Route 2: North River Road to College Boulevard to SR-76 to the west/southwest, western and central portions of the northern and southern development areas.
- Western Primary Route 3: North River Road to Douglas Drive to SR-76 to the west/southwest, western and central portions of the northern and southern development area.

Depending on the nature of the emergency requiring evacuation, it is anticipated that the majority of the community traffic would exit the project via two unnamed southerly ingress/egress roads for Northern Village (PA-3), one unnamed easterly ingress/egress road for the Hilltop Village (PA-4), or the three unnamed northerly ingress/egress roads for the Riverside Village (PA-1) and Village Core (PA-2) in the southern portion of North River Farms. These are the direct routes out of the community and onto the public North River Road and other downstream roadways for North River Farms. In a typical evacuation that allows several hours or more time (as experienced for most areas during the 2017 Lilac Fire), all traffic may be directed to the west or southwest and into Oceanside, and other surrounding cities. 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 some neighborhoods for temporarily sheltering in their homes.

4.1 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 include as many pre-designated transportation routes as possible.

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4.2 Evacuation Triggers

As identified in this evacuation plan, in case of wildfire, the preferred plan is early evacuation following the principles of “Ready, Set, Go”. The North River Farms Community and its structures will be designed and constructed to withstand significant wildfire. Nevertheless, a conservative approach to evacuations off site and out of the area are planned. As indicated in the 2003, 2007, 2014, 2016, and 2017 fires in San Diego County, along with numerous other large wildfires in southern California over the last decade, early notification and evacuation of residents is an effective means of limiting loss of life. Evacuation planning for wildfires in the North river Farms area is incident based, but uses Reverse 911 evacuation zones, incident pre-plans, and is executed by law enforcement and emergency operations agencies. Evacuations of specific areas are based on fire behavior (spread rates), area vulnerability, and road conditions.

The status of evacuation decision-making, i.e., trigger thresholds, methods, and management has been fine-tuned over the last decade from real-world implementation and evaluation of successes and failures. It is reasonable to assume, based on past examples, that the wildfire evacuation triggers in San Diego County are conservative in nature and would typically enable evacuation of threatened areas well before a fire encroaches. However, this evacuation plan provides a contingency plan for the rare event that there is not enough time for an off-site evacuation. This contingency plan is discussed in greater detail in the following sections.

4.2.1 Evacuation Trigger Thresholds

Based on Dudek’s review of fire behavior, fire spread rates, fire progression and spotting occurrence during the 2017 Lilac Fire (Figure 4) and confirmed by available fire behavior modeling, and given that, under some scenarios, may require extended timeframes to evacuate North River Farms, the recommended trigger for evacuation is:

1. **Red Flag Warning Period** (low humidity and high wind): whenever there is an “active wildfire” burning to the north, east, or south of North River Farms, inside the “GREEN” threshold perimeter on Figure 5, or when ordered to evacuate by fire or law officials, whichever occurs first, the North River Farms Community will be considered for evacuation by Incident managers. If fire burns into the area bounded by the “RED” threshold perimeter on Figure 5, evacuations will be re-evaluated and may include a decision to cease evacuations if already occurring in favor of temporary sheltering in site structures. *NOTE: Green trigger threshold limits is 3.4 to 11.5 miles from project site and based on Lilac Fire progression and Fire Modeling (Dudek 2018), enables up to three or more hours until fire arrival at North River Farms.*

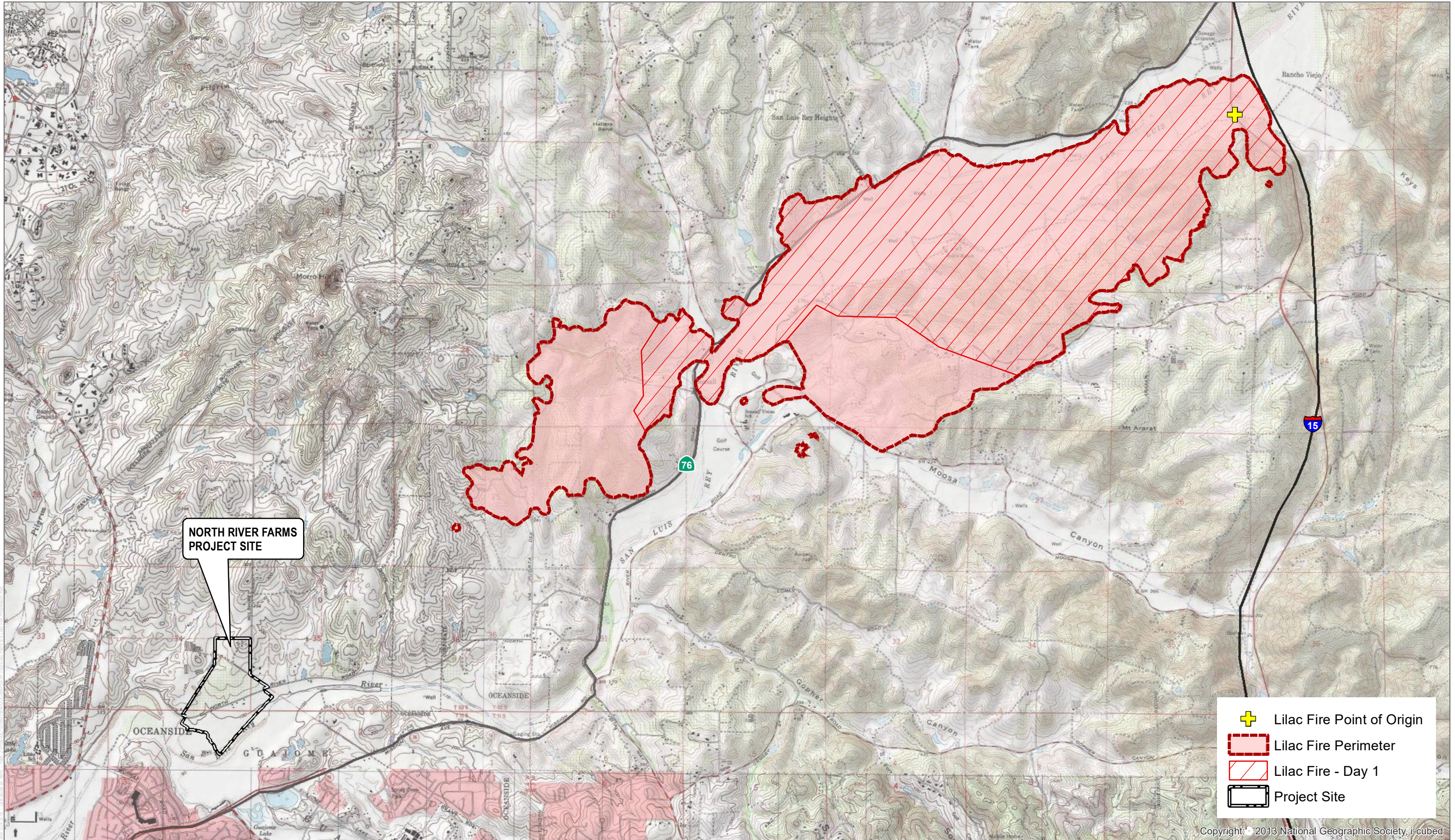
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2. **Non-Red Flag Warning Period** (higher humidity and typical winds): whenever there is an active wildfire burning within the “GREEN” threshold perimeter on Figure 6, or when ordered to evacuate by fire or law enforcement officials, the North River Farms Community will be considered for evacuation by Incident managers. If fire burns into the area bounded by the “RED” threshold perimeter on Figure 6, evacuations will be re-evaluated and may include a decision to cease evacuations if already occurring in favor of temporary sheltering in site structures. *NOTE: Green trigger threshold limits is 2.8 to 6.5 miles from project site and based on fire behavior modeling (Dudek, 2018), enables up to three or more hours until fire arrival at North River Farms.*

Winds associated with extreme weather can carry airborne embers miles ahead of the active fire front, igniting new fires that exponentially accelerate the fire spread rate and proportionally cut down the available time for evacuation. Conversely, fires occurring during the low fire season, when fuel moisture is higher and it is less likely to experience Santa Ana conditions, wildfires are less frequent and typically burn fewer acres (CAL FIRE 2013). The trigger thresholds provided are based on fire progression of the 2017 Lilac Fire.

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-  Lilac Fire Point of Origin
-  Lilac Fire Perimeter
-  Lilac Fire - Day 1
-  Project Site

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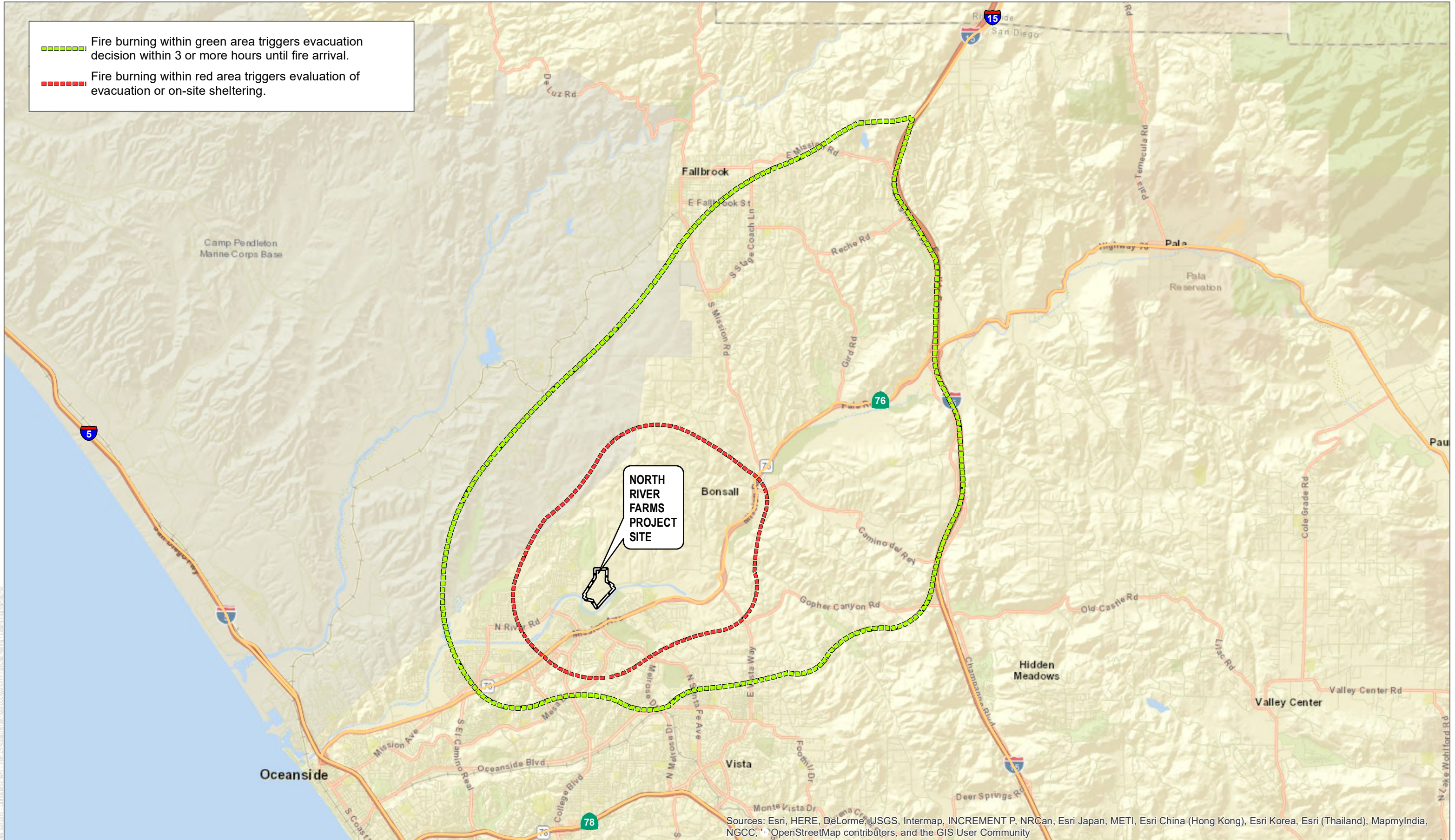
SOURCE: LILAC FIRE PROGRESSION: FRAP 2017



DUDEK

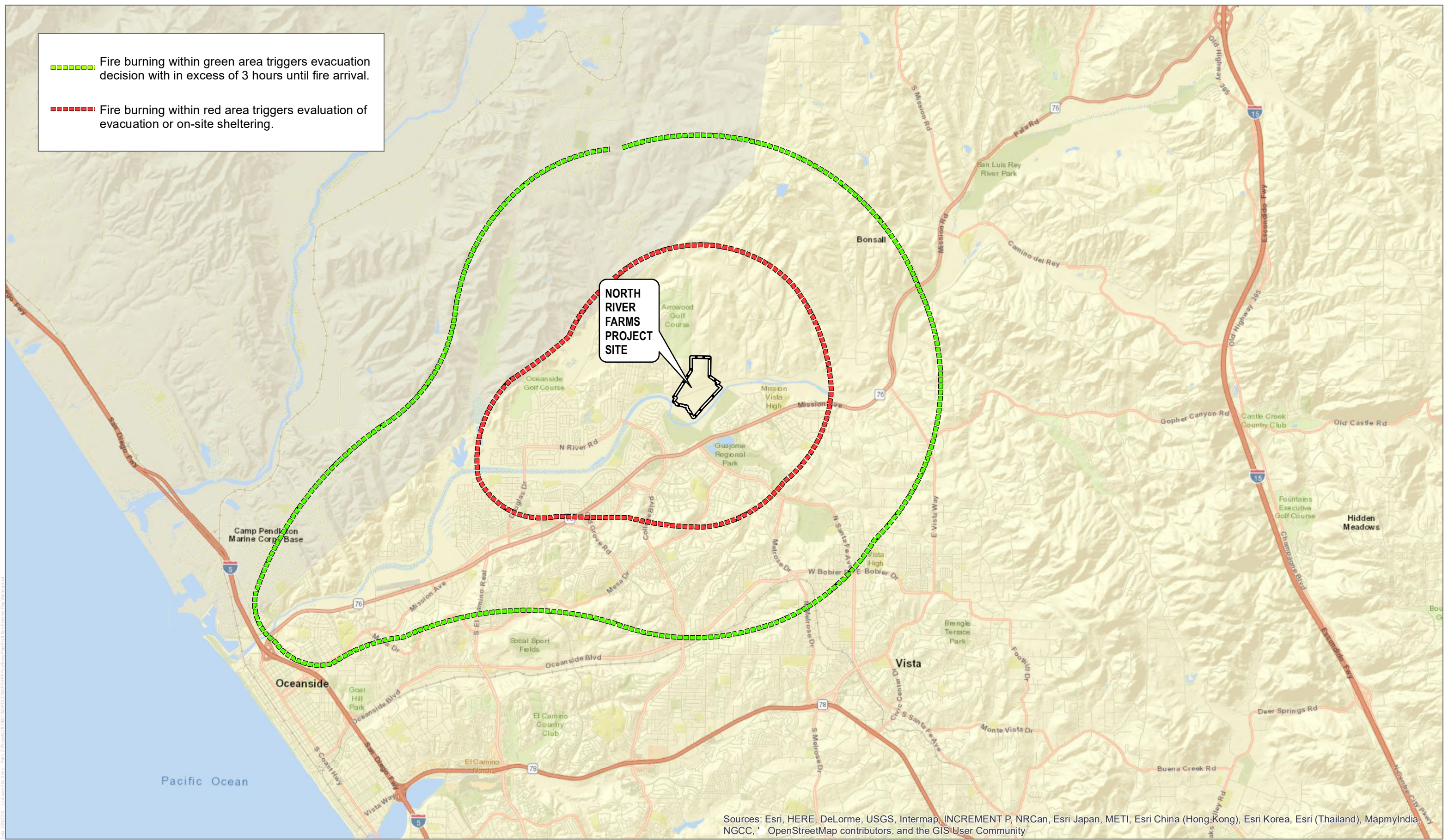
FIGURE 4
Lilac Fire Progression
 Wildland Fire Evacuation Plan for The North River Farms Project

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- - - Fire burning within green area triggers evacuation decision with in excess of 3 hours until fire arrival.
- - - Fire burning within red area triggers evaluation of evacuation or on-site sheltering.



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, OpenStreetMap contributors, and the GIS User Community

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5 NORTH RIVER FARMS RESIDENT FIRE/ EVACUATION AWARENESS

The North River Farms Community 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 the 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 North River Farms HOA will engage residents and OFD through a variety of methods.

This emergency evacuation plan will be provided to each homeowner/HOA member as well as being accessible on the HOA Website. Annual reminder notices will be provided to each homeowner encouraging them to review the plan and be familiar with community evacuation protocols. The HOA will coordinate with OFD to hold an annual fire safety and evacuation preparedness informational meeting. Representatives of OFD will be invited to attend and important fire and evacuation information reviewed. One focus of these meetings and of the HOA's annual message will be on the importance of each resident to prepare and be familiar with their own "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 living 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 insure 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 North River Farms FPP (Dudek 2018). Use only fire-resistant landscaping and maintain the ignition resistance of your home. Assemble emergency supplies and belongings in a safe spot. Confirm you are registered for Reverse 9-1-1 and AlertSanDiego alert system. Make sure all residents residing within the home understand the plan, procedures and escape routes.

"SET" – Situational Awareness When a Fire Starts: If a wildfire occurs and there is potential for it to threaten the North River Farms community, pack your vehicle with your emergency items. Stay aware of the latest news from local media, County of San Diego (<http://www.sdcountyemergency.com/updates/>) and OFD for updated information on the fire. If you are uncomfortable, leave the area.

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“GO!” – Leave Early! Following your Action Plan provides you with knowledge of the situation and how you will approach evacuation. Leaving early, well before a wildfire is threatening your community, provides you with the least delay and results in a situation where, if a majority of neighbors also leave early, firefighters are now able to better maneuver, protect and defend structures, evacuate other residents 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 community) is dangerous and exacerbates an already confusing situation. This North River Farms CWFEP provides key information that can be integrated into the individual Action Plans, 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 residents to register their cell phones for “AlertSanDiego”. The registration of cell phones can be done on line at www.ReadySanDiego.com. The North River Farms HOA will strongly encourage all residents to register telephone numbers.

As part of the North River Farms resident fire awareness and evacuation readiness program, information will be delivered in a variety of methods. The HOA will be responsible to provide and distribute to each homeowner a complete copy of the project's Fire Protection Plan and this CWFEP, including materials from the READY! SET! GO! Program. The HOA is also responsible for insuring the distribution of copies of the aforementioned materials to those individuals that purchase properties for re-sales and to the management of non-residential properties. Management of the commercial properties will be responsible for the dissemination of the Evacuation Plan information to their employees.

As part of the approval of this project, it shall be binding on the HOA to actively participate as a partner with the OFD to assist with the coordination and distribution of fire safety information they develop.

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6 NORTH RIVER FARMS 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, OFD, OPD, and/or County Office of Emergency Management) can assess the situation and determine the best course of action. Based on the community, 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 North River Farms community to urban areas further from an encroaching wildfire (likely to urban areas northeast, east, southeast, south and west) well before fire threatens. This type of evacuation must include a conservative approach to evacuating, 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).

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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 their own home if it is ignition resistant and defensible, such as those at North River Farms. 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 community 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 North River Farms Community Evacuation Baseline

For purposes of this CWFEP, the first and most logical choice for all of the residents and guests within the boundaries of the North River Farms community 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 each household develop a plan that is clearly understood by all family members and participates in the educational and training programs sponsored by the North River Farms HOA and the OFD. In addition, it is imperative that the “READY! SET! GO!” information be reviewed on a routine basis along with the accompanying maps illustrating evacuation routes, temporary evacuation points and pre-identified safety zones. 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 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, North River Farms residents will proceed according to known available routes away from the encroaching fire as detailed in Section 1 of this plan. Residents are cautioned not to rely on navigation apps which may inadvertently lead them toward an oncoming fire.

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Note: This evacuation plan should be updated periodically, (suggested every 5 years) to review changing conditions in the Oceanside 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 community 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, where there are numerous examples of people sheltering in their homes, in hardened structures, in community buildings, in swimming pools, and in cleared or ignition resistant landscape open air areas. The preference for North River Farms 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 North River Farms include:

- Fires that prevent safe passage along planned evacuation routes (particularly for North River Road and portions of SR-76)
- 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 OPD and OFD conduct concerted pre-planning efforts focusing on evacuation contingency planning for civilian populations when it is considered safer to temporarily 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, 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 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

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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 fuelbreaks; 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 worst case 26-foot-tall flame lengths in treated fuels that may be possible adjacent this site (Dudek, 2018), then a 100-foot separation would be required, and potentially more if there were site-specific features that would result in more aggressive fire behavior. This setback would be achieved on all interior streets within the North River Farm developed areas.

If one considers the ignition resistant and maintained landscaping within each of the North River Farms neighborhoods, along with the adjacent 100 feet wide fuel modification zones, agricultural

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areas, and Chapter 7A of California Building Code compliant structures. The North River Farms interior roads and neighborhoods would provide Safety Zones available to responding firefighters. The North River Farms neighborhoods as Safety Zones can be part of OFD's 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 OFD 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.

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

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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 NOT a substitute for a Safety Zone. TRA pre-planning is difficult, at best because they are very site and fire behavior specific. For the North River Farms community, TRAs would likely include navigating into any of the neighborhoods where up to 100-foot-wide fuel modification zones provide defensible space and maintained landscapes are provided, along with ignition resistant residences and wide roads that offer numerous opportunities for TRA.

The entire developed portions of the North River Farms neighborhoods, but especially the interior areas of neighborhoods, are considered TRAs. This is an important concept because it offers last-resort, temporary refuge of firefighters, and in a worst-case condition, residents. 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 residences that can be considered for TRA include the following features:

- Ignition Resistant Construction
- up to 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 State Route 76 or North River Road or in the foothills north and northeast of the site, including temporary refuge within residences or elsewhere on site is considered a contingency plan for North River Farms. 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.

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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 OFD. Evacuation has been the standard term used for emergency movement of people and implies imminent or threatening danger. The term in this CWFEP, 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 residents (Quarantelli and Dynes 1977; Lindell and Perry 2004) as will occur within the North River Farms 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 in North River Farms 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 residences either temporarily or permanently.

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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.

North River Farms Community Approach:

The North River Farms community will provide information to residents regarding notifying OFD, County OES and Health and Human Services of special needs residents 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 and guests to the North River Farms community will be advised of their options during an emergency by law enforcement or fire officials, residents whom they are visiting, commercial vendor staff, or HOA 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.

The North River Farms project does not include horse owners. Household pets will be a common occurrence.

The North River Farms Community Approach

- 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.
- Develop a registration for owners of animals who cannot evacuate them without assistance so that volunteer organizations or individuals, can provide resources.

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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 residents 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, community briefings, and informational updates at shelters.

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

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7 LIMITATIONS

This CWFEP has been developed based on wildfire and evacuation standards and the San Diego County Evacuation Annex Q (San Diego County 2014) and is specifically intended as a guide for evacuations for the North River Farms Community. This plan provides basic evacuation information that will familiarize North River Farms residents 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 CWFEP promotes the “Ready, Set, Go!” model, adopted by Oceanside Fire Department, 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, and visitor education, and evacuation planning efforts. The North River Farms populace 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 residents is available. This contingency would include moving people to pre-designated temporary refuge areas, including possibly within North River Farms residences and other structures, until it is safe to evacuate or the threat has been mitigated.

Ultimately, it is the intent of this Evacuation Plan to guide the implementation of evacuation procedure recommendations such that the process of evacuating people from the North River Farms 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 North River Farms residents will be aware of and familiar with this evacuation plan as the HOA will post it on its Website and provide reminders to residents on at least an annual basis. 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 Wildland Fire Evacuation Plan for The North River Farms Community

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 Evacuation Plan will provide for an informed populace regarding evacuations. The North River Farms community is 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 safety than are available from less defensible communities.

This CWFEP 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 North River Farms fuel modification landscape, infrastructural, and ignition resistant construction components according to the appropriate standards 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 Wildland Fire Action Guide

READY, SET, GO!

YOUR PERSONAL WILDLAND FIRE ACTION GUIDE



READY, SET, GO!

Wildland Fire Action Guide

Saving Lives and Property
through Advance Planning



Fire is a constant threat in San Diego County, and drought, high temperatures in the summer and fall, combined with seasonal Santa Ana winds can lead to explosive fire growth.

In San Diego County, first responders are busy year-round fighting fires. When large fires threaten our community, local, state, federal, tribal, military and other agencies work together to save lives, protect property, and help those impacted by the disaster.

First responders can't do it alone though. Residents, especially those in the Wildland Urban Interface, play a critical role in being prepared for wildfires before, during, and after the next one strikes.

This guide has been modeled off of the Ready, Set, Go! program that is used locally, throughout California, and across the nation. This version is customized for San Diego County, with important local tips and information.

Use this guide to get "Ready" by making your home hardened against wildfire by using defensible space and smart fire resistant building and design choices. Create and practice a family disaster plan that includes storing essentials like food and water supplies, knowing how you'll meet up or communicate with each other, where you can safely evacuate to, and other important information.

Visit ReadySanDiego.org to register with AlertSanDiego to receive emergency alerts via email, text, cell and landline phones, and download the SD Emergency App to get the latest emergency updates delivered to your Android/iOS devices.



Be "Set" and prepared to leave when in danger by monitoring local media, viewing disaster updates on SDCountyEmergency.com, talking with 2-1-1 San Diego, and taking important steps to harden your home even further when you decide to evacuate.

Finally, be able to "Go" and go early, both to keep you and your family safe, and to make it easier for first responders to get into your community.

This guide is a great place to start as you take action to protect your family home, and community.

Tony Mecham, County Fire Chief

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Photos courtesy of CAL FIRE, FEMA and ©Kevin Pack/K.E. Photography

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Living in the Wildland Urban Interface and the Ember Zone

Ready, Set, Go! begins with a house that firefighters can defend

Defensible Space Works!

If you live next to a naturally vegetated area, often called the Wildland Urban Interface, provide firefighters with 100 feet of defensible space to protect your home. The buffer zone you create by removing weeds, brush and thinning vegetation helps keep the fire away from your home and reduces the risk from flying embers. Firewise Communities and your local fire department's brush management guidelines provide valuable guidance on property enhancements.



A home within one mile of a natural area is in the Ember Zone. Wind-driven embers can attack your home. You and your home must be prepared well before a fire occurs. Ember fires can destroy homes or neighborhoods far from the actual flame front of the wildland fire.



What is Defensible Space?



Defensible space is the required space between a structure and the wildland area that, under normal conditions, creates a sufficient buffer to slow or halt the spread of wildland fire to a structure. It protects the home from igniting due to direct flame or radiant heat. Defensible space is essential for structure survivability during wildland fire conditions. For more information about defensible space zones and preparedness techniques within each, visit ReadySanDiego.org/wildland-fire

ZONE ONE

Zone One extends 50 feet from your home.

- Must be permanently irrigated to maintain green and healthy plants.
- Is primarily low-growing plant material, with the exception of trees. Plants shall be low-fuel and fire-resistive.
- Trim tree canopies regularly to remove dead wood and keep branches a minimum of 10 feet from structures, chimney outlets and other trees.
- Remove leaf litter (dry leaves/pine needles) from yard, roof and rain gutters.
- Relocate woodpiles and other combustible materials into Zone Two.
- Remove combustible material and vegetation from around and under decks.
- Remove or prune vegetation near windows.
- Remove "ladder fuels" (low-level vegetation that would allow the fire to spread from the ground to the tree canopy). Create a separation between low-level vegetation and tree branches by reducing the height of the vegetation and/or trimming low branches.

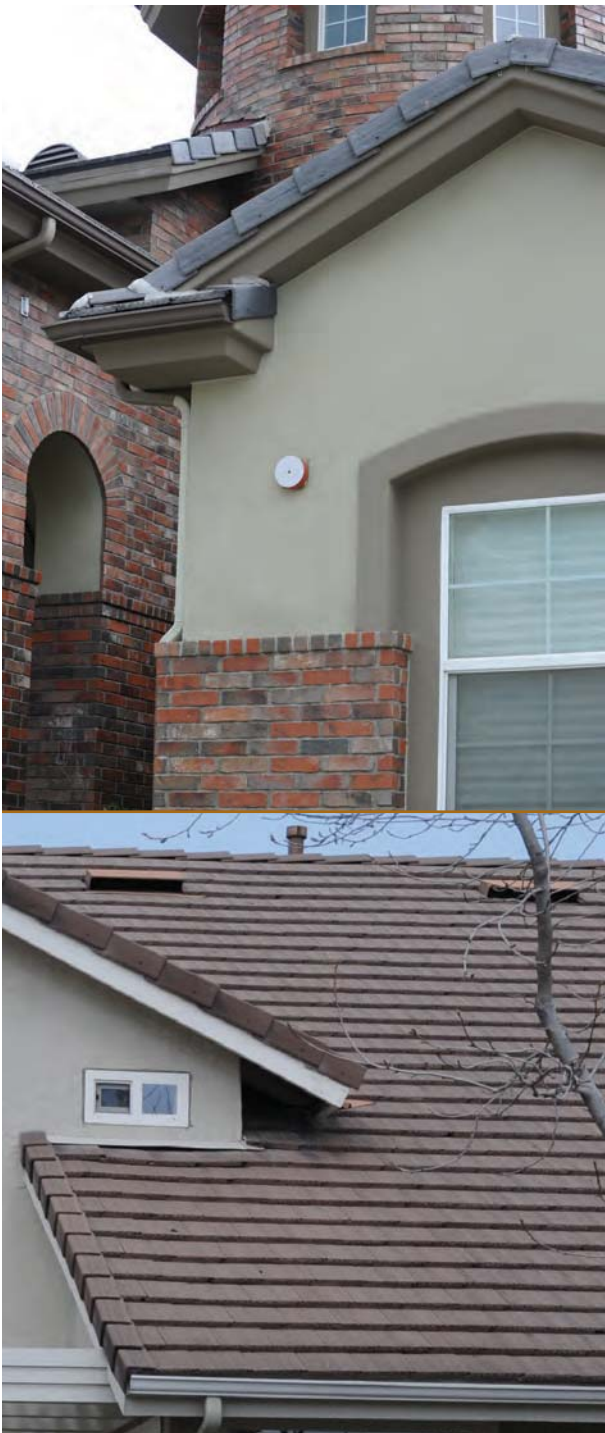
ZONE TWO

Zone Two extends 50 to 100 feet from your home.

- Minimize the chance of fire jumping from plant to plant by removing dead material and removing or thinning vegetation seasonally. The minimum spacing between vegetation is three times the dimension of the plant.
- There should be no permanent irrigation in Zone Two.
- Remove "ladder fuels."
- Cut or mow annual grass down to a maximum height of 4 inches.
- Trim tree canopies regularly to keep branches a minimum of 10 feet from other trees.

What is a Hardened Home?

Construction materials and the quality of the defensible space surrounding a home are what gives it the best chance to survive a wildland fire. Embers from a wildland fire can find the weak link in your home's fire protection scheme and gain the upper hand because of a small, overlooked or seemingly inconsequential factor. However, there are measures you can take to safeguard your home from wildland fire. While you may not be able to accomplish all the measures listed below, each will increase your home's, and possibly your family's, safety and survival during a wildland fire.



ROOFS

Roofs are the most vulnerable surface where embers land because they can lodge and start a fire. Roof valleys, open ends of barrel tiles and rain gutters are all points of entry.

EAVES

Embers can gather under open eaves and ignite exposed wood or other combustible material.

VENTS

Embers can enter the attic or other concealed spaces through vents and ignite combustible materials. Vents in eaves and cornices are particularly vulnerable, as are any unscreened vents.

WALLS

Combustible siding or other combustible or overlapping materials provide surfaces or crevices for embers to nestle and ignite.

WINDOWS and DOORS

Embers can enter through open windows and gaps in doors, including garage doors. Plants or combustible storage near windows can ignite from embers and generate heat that can break windows and/or melt combustible frames.

BALCONIES and DECKS

Embers can collect in or on combustible surfaces or the undersides of decks and balconies, ignite the material and enter the home through walls or windows.

To harden your home further, consider protecting your home with a residential fire sprinkler system. In addition to extinguishing a fire started by an ember that enters your home, it also protects you and your family year-round from any fire that may start in your home.

Tour a Wildland Fire Prepared Home

Home Site and Yard: Ensure you have at least a 100-foot radius of defensible space (thinned vegetation) around your home. Note that even more clearance may be needed for homes in severe hazard areas. This means looking beyond what you own to determine the impact a common slope or neighbors' yard will have on your property during a wildland fire.

Cut and remove dry weeds and grass before noon when temperatures are cooler to reduce the chance of sparking a fire.

Landscape with fire-resistant plants that have a high moisture content and are low-growing.

Keep woodpiles, propane tanks and combustible materials away from your home and other structures such as garages, barns and sheds.

Ensure that trees are far away from power lines.

Inside: Keep working fire extinguishers on hand. Install smoke alarms and carbon monoxide detectors on each level of your home and near bedrooms. Test them monthly and change the batteries twice a year.

Address: Make sure your address is clearly visible from the road.

Roof: Your roof is the most vulnerable part of your home because it can easily catch fire from wind-blown embers. Homes with wood-shake or shingle roofs are at high risk of being destroyed during a wildland fire.

Build your roof or re-roof with fire-resistant materials such as composition, metal or tile. Block any spaces between roof decking and covering to prevent ember intrusion.

Clear pine needles, leaves and other debris from your roof and gutters.

Cut any tree branches within ten feet of your roof.

Vents: Vents on homes are particularly vulnerable to flying embers.

All vent openings should be covered with $\frac{1}{8}$ inch metal mesh. Do not use fiberglass or plastic mesh because they can melt and burn.

Attic vents in eaves or cornices should be baffled or otherwise protected to prevent ember intrusion (mesh is not enough).

Windows: Heat from a wildland fire can cause windows to break even before the home ignites. This allows burning embers to enter and start internal fires. Single-paned and large windows are particularly vulnerable.


Install dual-paned windows with the exterior pane of tempered glass to reduce the chance of breakage in a fire.

Limit the size and number of windows in your home that face large areas of vegetation.

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 with fire-resistant building materials, such as brick, cement-fiber board, masonry or stucco.

Be sure to extend materials from foundation to roof.



Garage: Have a fire extinguisher and tools such as a shovel, rake, bucket and hoe available for fire emergencies.

Install a solid door with self-closing hinges between living areas and the garage. Install weather stripping around and under door to prevent ember intrusion.

Store all combustibles and flammable liquids away from ignition sources.

Driveways and Access Roads: Driveways should be designed to allow fire and emergency vehicles and equipment to reach your house.

Access roads should have a minimum 10-foot clearance on either side of the traveled section of the roadway and should allow for two-way traffic.

Ensure that all gates open inward and are wide enough to accommodate emergency equipment.

Trim trees and shrubs overhanging the road to a minimum of 13½ feet to allow emergency vehicles to pass.

Non-Combustible Fencing: Make sure to use non-combustible fencing to protect your home during a wildland fire.

Non-Combustible Boxed In Eaves: Box in eaves with non-combustible materials to prevent accumulation of embers.

Raingutters: Screen or enclose rain gutters to prevent accumulation of plant debris.

Water Supply: Have multiple garden hoses that are long enough to reach any area of your home and other structures on your property.
If you have a pool or well, consider a pump.

Chimney: Cover your chimney and stovepipe outlets with a non-flammable screen of ½ inch wire mesh or smaller to prevent embers from escaping and igniting a fire.

Make sure that your chimney is at least 10 feet away from any tree branches.

Decks and Balconies: Decks, balconies, and other floor projections and attachments must be of one – or a combination – of the following:

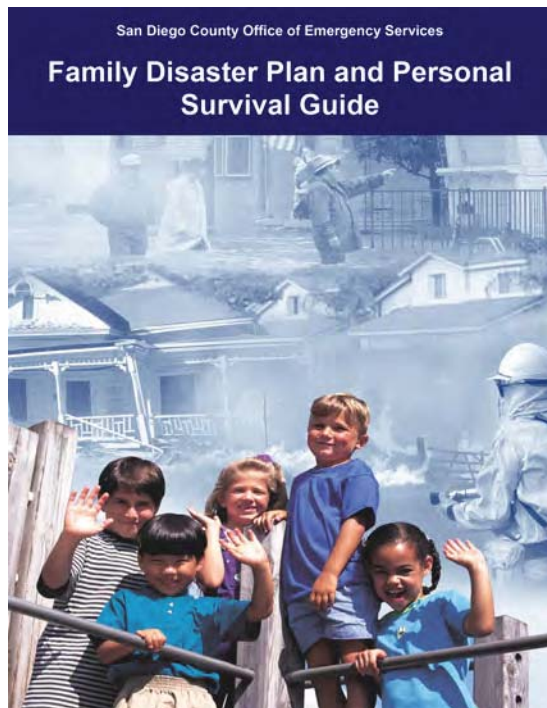
- non-combustible construction (e.g., concrete, metal)
- protected by one-hour fire-resistive material (e.g., stucco, cement-fiber board, ceramic tile, deck surface listed by approved evaluation service as one-hour-rated or Class A roof covering)
- approved fire-retardant treated materials (factory-applied fire retardant, pressure-treated lumber, listed for exterior use, installed per listing)
- heavy timber construction (minimum 4x8 joists, 4x10 or 6x8 beams, 3x ledgers, and 6x6 columns/posts)
- alternative decking materials per County Building Code 92.1.709A.1.4

READY, SET, GO!

Create Your Own Action Guide

Now that you've done everything you can to protect your house, it's time to prepare your family. Your **Wildland Fire Action Guide** must be prepared well in advance of a fire. Include *all* members of your household. Use these checklists to help you gain a situational awareness of the threat and to prepare your Wildland Fire Action Guide. For more information on property and home preparedness before a fire threat, review the preparedness checklist on the Firewise Communities website, www.firewise.org

Ready – Preparing for the Fire Threat



For a more extensive survival guide, please visit: ReadySanDiego.org/make-a-plan

- Create an in-depth family disaster plan at ReadySanDiego.org
- Register to receive emergency notifications on phone, cell, text, and email for your area. Sign up at AlertSanDiego.org
- Have fire extinguishers on hand
- Ensure that your family knows the location of your utility shut-off controls
- Plan and practice several different evacuation routes
- Designate an emergency meeting location
- Assemble an emergency supply kit (water, food, medicine)
- Maintain a list of emergency contact numbers
- Have a portable radio



All the information in your hands when you need it! Get the SD Emergency App for Android and iOS!



Find out how to volunteer, and get the most up-to-date disaster information! Call 2-1-1



Visit ReadySanDiego.org for all your preparedness needs! Get a plan, get the app, get informed!

Set – Situational Awareness when a Fire Starts

- Alert family and neighbors
- Ensure that you have your emergency supply kit
- Stay tuned to media, visit: SDCountyEmergency.com
- Close all windows and doors, leaving them unlocked
- Remove flammable window shades and curtains
- Move furniture to the center of the room
- Turn off pilot lights and air conditioning
- Leave inside and outside lights on so firefighters can see your house through smoke
- Bring patio furniture, children's toys, etc. inside
- Turn off propane tanks and other gas at the meter
- Don't leave sprinklers on or water running
- Back your car into the driveway to facilitate a quick departure

- Cover attic and ground vents with pre-cut plywood or commercial covers
- Call 2-1-1 for all non-emergency inquiries or visit: 211SanDiego.org

IF YOU ARE TRAPPED: SURVIVAL TIPS

- Call 9-1-1
- Remain inside your home until the fire passes
- Shelter away from outside walls
- Bring garden hoses inside the house so embers don't destroy them
- Patrol inside your home for spot fires and extinguish any you find
- Wear long sleeves and long pants made of natural fibers such as cotton
- Stay hydrated
- Ensure you can exit the home if it catches fire (remember if it is hot inside the house, it is four to five times hotter outside)
- Fill sinks and tubs for an emergency water supply
- Place wet towels under doors to keep smoke and embers out
- After the fire has passed, check your home and roof. Extinguish any fires, sparks or embers
- Check inside the attic for hidden embers
- If there are fires that you cannot extinguish with a small amount of water or in a short period of time, call 9-1-1



Go – Leave Early

By leaving early, you give your family the best chance of surviving a wildland fire. You also help firefighters by keeping roads clear of congestion.

WHEN TO LEAVE

Do not wait to be advised to leave if there is a possible threat to your home or evacuation route. Leave early enough to avoid being caught in fire, smoke or road congestion. If you are advised to leave by local authorities, do not hesitate!

MEETING LOCATION

Travel to a predetermined location. It should be a low-risk area, such as a well-prepared neighbor or relative's house, a shelter or motel, etc.

HOW TO GET THERE

Know several travel routes out of your community in case one route is blocked by the fire or by emergency vehicles.

WHAT TO TAKE

Take your emergency supply kit containing your prepared family and pet's necessary items.



The County of San Diego Office of Emergency Services has a free, printable, All Hazards Family Disaster Plan and Survival Guide at: ReadySanDiego.org/make-a-plan

Here is a brief checklist to get your emergency supply kit started.

- Three-day supply of water (one gallon per person per day)
- Non-perishable food for all family members and pets (three-day supply)
- First aid kit
- Flashlight, battery-powered radio, and extra batteries
- An extra set of car keys, credit cards and cash or traveler's checks
- Sanitation supplies
- Extra eyeglasses or contact lenses
- Important family documents and contact numbers
- Map marked with evacuation routes
- Prescriptions or special medications
- Family photos, valuable and other irreplaceable items that are easy to carry
- Personal computers, hard drives, disks and flash drivers
- Chargers for electronic communication devices

Note: Keep a pair of old shoes and a flashlight handy in case of a sudden evacuation at night.

Why can't I immediately return home?

Although a fire has been contained or extinguished there are post-hazard concerns that must be addressed before re-entry into the impacted area(s) may be permitted. Priorities for re-entry include:

1. Safety
2. Security
3. Damage Assessment
4. Restoration of Services
5. Communication of Information

The impacted areas must be thoroughly investigated to ensure it is safe for residents to return and that services have been restored. You will be notified of the re-entry status through: *emergency broadcast radio, television, internet www.SDCountyEmergency.com, 2-1-1, community briefings, and informational updates at shelters.*

Returning Home

After a disaster, **DO NOT attempt to return to your home or cross any barriers or caution tape without permission from law enforcement officials.** When returning home, be cautious in your neighborhood and watch out for:

- Emergency personnel still operating in the area.
- Power lines lying on the ground.
- Small fires that may flare up without warning.
- Ash pits, which are holes filled with hot ash created by burned trees.
- Damaged buildings or debris (including glass, nails, etc.)
- Charred power poles and trees that may be unstable and fall.

Take the following precautions when attempting to enter your house:

<p>POWER:</p> <p><i>If a person or piece of equipment comes in contact with an electric line, or if a line is down or broken.</i></p> <ul style="list-style-type: none"><input type="checkbox"/> Call 9-1-1.<input type="checkbox"/> If you see an electrical fire, fight it with a dry CO(2) extinguisher.<input type="checkbox"/> If possible, shut off the power.<input type="checkbox"/> Don't touch the person or any equipment involved. The line may still be energized and dangerous.<input type="checkbox"/> Freeing someone from energized power lines or equipment should only be attempted by a qualified SDG&E employee or a trained rescuer such as a fire fighter.<input type="checkbox"/> Always assume that power lines are energized.<input type="checkbox"/> Do not smoke or attempt to light anything. Use a flashlight instead.	<p>GAS:</p> <ul style="list-style-type: none"><input type="checkbox"/> Check to see if your gas utility is working properly. If you smell gas, leave your home immediately, and call (24/7) SDG&E at 1-800-411-7343.<input type="checkbox"/> DO NOT light a match, candle, or cigarette.<input type="checkbox"/> DO NOT turn electrical devices on or off, including light switches.<input type="checkbox"/> DO NOT start an engine or use any device, including a telephone, which could cause a spark.<input type="checkbox"/> DO NOT attempt to control the leak or repair the damaged pipe or meter. Do not use or turn off any equipment that could cause a spark.
<ul style="list-style-type: none"><input type="checkbox"/> Check for burning embers on roofs, gutters, porches, attic, crawlspace, and throughout your property for several days after a wildfire.	<ul style="list-style-type: none"><input type="checkbox"/> Check for any structural damage before entering your home. If you are uncertain, have your home professionally inspected before returning.
<ul style="list-style-type: none"><input type="checkbox"/> Do not smoke or attempt to light anything as there could be flammables or leaking gases. Use a flashlight instead.	<ul style="list-style-type: none"><input type="checkbox"/> Open windows and doors to allow airflow, which will help dry out of any water damage areas.

San Diego Gas & Electric can be reached at 1-800-411-7343 or SDGE.com/customer-service/contact-us. For more information on damage assessment visit the County's Recovery page at SDCountyRecovery.com.

Fire Action Guide

Out of Area Contact: _____ **Phone #:** _____

Work: _____ **School:** _____ **Other:** _____

Evacuation Routes: _____

Meeting Location: _____ **Location of Supply Kit:** _____

Information: SDCountyEmergency.com 211SanDiego.org **SD Emergency App**

You can create a more in-depth plan for free at: ReadySanDiego.org/make-a-plan



READY, SET, GO!

Safety Checklist

Tips To Improve Family and Property Survival During A Wildland Fire

Home

- | | Yes | No |
|--|--------------------------|--------------------------|
| 1. Does your home have a metal, composition, tile or other non-combustible roof with capped ends and covered fascia? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Are the rain gutters and roof free of leaves, needles and branches? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Are all vent openings screened with 1/8 inch non-combustible, corrosion-resistant metal mesh? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Are approved spark arrestors on chimneys? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Does the house have non-combustible siding material? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Are the eaves "boxed in" and the decks enclosed? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Are the windows dual-paned or tempered glass? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Are decks, porches and similar areas made of non-combustible material and are they free of easily combustible material? | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Is all firewood at least 30 feet from the house? | <input type="checkbox"/> | <input type="checkbox"/> |

Defensible Space

- | | Yes | No |
|--|--------------------------|--------------------------|
| 1. Has dead vegetation been removed from the defensible space zones around your home? (Consider adding distance due to slope of property.) | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Is the required separation between shrubs maintained? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Have ladder fuels been removed? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Is there a clean and green area extending at least 50 feet from the house? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Is there a non-combustible area within five feet of the house? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Is the required separation between trees and crowns maintained? | <input type="checkbox"/> | <input type="checkbox"/> |

Emergency Access

- | | Yes | No |
|---|--------------------------|--------------------------|
| 1. Is the home address plainly legible and visible from the street? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Are trees and shrubs overhanging the street trimmed to 15½ feet? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. If your home has a long driveway, does it have a suitable turnaround area? | <input type="checkbox"/> | <input type="checkbox"/> |



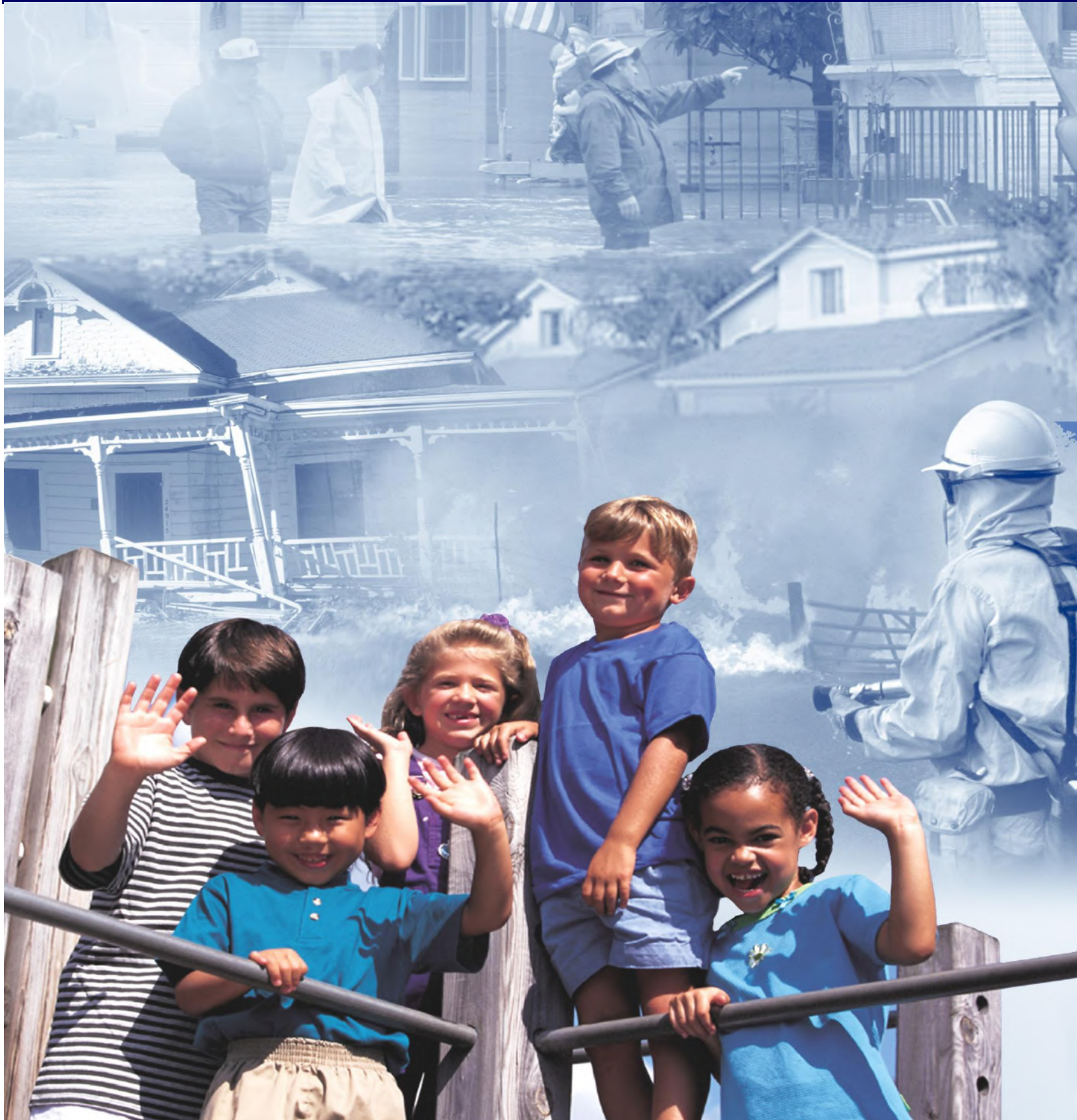
APPENDICES

B-1 THROUGH B-2

Family Disaster Plan and Personal Survival Guide

San Diego County Office of Emergency Services

Family Disaster Plan and Personal Survival Guide



Family Disaster Plan and Personal Survival Guide

I. PREPARATION

Family Meetings

At least once a year, have a meeting with your family to discuss and update your disaster plan. Determine what additional training, equipment, and supplies are needed to meet your family's needs. Don't forget to practice! Occasional drills can improve reaction time and help to avoid panic in an actual emergency.

- A.** Know how and where to shut off utilities.

Location of Main Water Valve: _____

Location of Gas Valve*: _____

Location of Wrench: _____

Location of Garage Door Manual Override: _____

Location of Other Utilities: _____

* Do not shut off gas unless you suspect a leak exists.

- B.** On a separate sheet of paper, draw a floor plan of your home showing the location of exit doors and windows, utility shutoffs, first aid kit, and emergency supplies. Ensure EVERYONE in your household is familiar with it. Show it to babysitters and house guests when you're going away.

- C.** Reunion locations: Establish two places where you and your family can meet following an emergency. One immediately outside of your home, e.g. a neighbor's mailbox, or community park **AND** another site outside of your immediate community in case you are unable to return home.

Home Location: _____

Away-from-Home Location: _____

- D.** Out-of-State Contact: Name and telephone number of a person outside of the state for family members to call and report their location and condition. Everyone should memorize this number!

Name: _____

Location: _____ Phone: (_____) _____

- E.** What is your children's school disaster policy?

Are medical consent forms for your children complete and current? _____

Where are they located? _____

- F.** Assemble a Home Emergency Supply Kit. Store it in a convenient and accessible location. See Section VII for details on what to put inside your Home Emergency Supply Kit.

Location of Home Emergency Supply Kit: _____



Family Disaster Plan and Personal Survival Guide

II. TRAINING

- A. Learn how to protect yourself from falling objects, smoke, fire, toxic fumes, etc.
- B. Learn First Aid/CPR

Person(s) Trained:

Name: _____ Date Training Expires: _____

Name: _____ Date Training Expires: _____

III. BEFORE A DISASTER

There are many different kinds of disasters, such as earthquakes, fires, floods, airplane crashes, chemical spills, and explosions, which seldom give warning and can be equally devastating to their victims. Although this guide is primarily about earthquake preparation, the steps you take will help your family prepare for any type of disaster that could strike in your community. For additional information on local disaster preparedness for your home, school, and business visit www.ReadySanDiego.org.

- A. Register your cell phone, Voice over Internet Protocol (VoIP) phone, and email address with AlertSanDiego*. **Listed and unlisted landlines are already registered. Registering makes it more likely that you will receive an emergency notification. Registration is quick and simple.**
**Also available in accessible formats such as American Sign Language.*
- B. Download the **SD Emergency App** for Android and iOS devices.
- C. Inspect your home. Identify potential hazards and evacuation routes.
- D. Secure water heater and tall or heavy furniture to wall studs.
- E. Move heavy items to lower shelves in bookcases.
- F. Install clips, latches and other locking devices on cabinet doors.
- G. Provide strong support and flexible connections on gas appliances.
- H. Remove or isolate and secure flammable materials.
- I. Review and practice this plan.



IV. DURING AN EARTHQUAKE

- A. If you are indoors **STAY THERE**. Move away from windows, bookcases, and high/overhanging shelves. Get under a sturdy table or desk and hold onto it. Be prepared to move with it and **HOLD** that position until the shaking stops and it is safe to relocate. If there is no desk or table to get under, brace yourself in an interior corner. Watch for falling, flying and sliding objects, and be especially careful around windows, as they can shatter during an earthquake.

NOTE: *If you are in a mobile home which is resting on A-Frame supports, get on top of the bed or sofa and cover your head and face. If a mobile home slips off the supports they may penetrate the flooring and cause injuries.*

- B. If you are outdoors, move to an open area away from buildings, trees, power poles, brick or block walls and other objects that could fall.
- C. If you are in an automobile, stop and stay in it until the shaking ends. Avoid stopping near trees and power lines or on or under overpasses or bridges.
- D. If you are in a multi-level building, get under a desk and hold on, or crouch next to an interior wall until the shaking stops. **DO NOT USE THE ELEVATOR TO EVACUATE.** Use the stairs.
- E. If you are in a store, get under a table or any sturdy object. Avoid stopping under anything that could fall. **DO NOT RUN FOR THE EXIT.** After the shaking has stopped, choose your exit carefully.

Family Disaster Plan and Personal Survival Guide

V. IF YOU EVACUATE

- A.** Take with you:
- Medicines and first aid kit
 - Flashlight, radio and batteries
 - Important documents and cash
 - Blankets and extra clothes
 - Personal sanitary items
 - Any additional items you feel are necessary (e.g. photos, heirlooms, jewelry, etc.)
- B.** Make arrangements for pets. Don't forget food, medications, vaccination records, and other important items.

VI. AFTER A DISASTER

- A.** Put on heavy shoes immediately to avoid injury from stepping on glass.
- B.** Locate a light source, such as a flashlight, if necessary.
- C.** Check for injuries and administer first aid.
- D.** Check for fires and fire hazards.
- Sniff for gas leaks, starting at the hot water heater. If you smell gas, hear a hissing sound or suspect a leak, turn off the main gas valve, open the windows and carefully leave the house. **DO NOT TURN LIGHTS ON OR OFF. DO NOT STRIKE MATCHES.**
- NOTE:** Do not shut off the gas unless you suspect a leak exists. Only the gas company can restore service.
- If necessary, turn off the electrical system at the main circuit breaker or fuse box.
- E.** Check on your neighbors.
- F.** Visit www.SDCountyEmergency.com or the **SD Emergency App** for updates, shelter locations, interactive mapping information (e.g. evacuation areas and hazard perimeters), official social media feeds, and other critical information.
- G.** Listen for advisories using a battery powered radio. The primary Emergency Alert System station for San Diego County is KOGO AM 600. The secondary station is KLSD AM 1360.
- H.** Do not use the phone except in emergencies. Only call 9-1-1 for life threatening emergencies. Have a plug-in analog phone in case the power is out, but phone lines are still working.
- I.** For general and updated disaster information or volunteer opportunities, call 2-1-1.
- J.** Do not touch downed power lines or objects touching downed wires. Do not stand in water near downed lines.
- K.** Remove fallen debris that may cause personal injury.
- L.** Assess house, roof, and chimney for damages.
- M.** Be prepared for aftershocks.
- N.** Open closets and cupboards carefully because items may have fallen or become rearranged.
- O.** Cooperate with public safety officials.
- P.** Be prepared to evacuate when/if necessary.
- Q.** DO NOT GO SIGHTSEEING!

Family Disaster Plan and Personal Survival Guide

VII. HOME EMERGENCY SUPPLIES

This list contains items usually available in your home. It is recommended that they be organized and located together for easy access during an emergency. Your emergency supplies should be sufficient to sustain you, your family and pets for a **minimum of 72 hours**. A two (2) week supply of prescription and necessary over-the-counter medications is recommended.

Basic Supplies

- Water* – minimum of 1 gallon per person per day
- Non-Perishable Foods*
- First Aid Kit and Manual
- Can opener – non-electric
- Watch or clock – non-electric
- Plug-in analog telephone
- Cash
- Important documents
- Activity items for adults (e.g. deck of cards) and kids (e.g. coloring books with crayons)
- Blankets or sleeping bags for each member of the family
- Radio – portable, with spare batteries
- Prescription and over-the-counter medications*
- Additional equipment – glasses, dentures, hearing aids
- Flashlight – spare batteries and light bulb
- Fire extinguisher – multipurpose labeled “ABC”
- Whistle
- Dust mask

*Rotate food, water, and medications as necessary. Remember to consider household members with unique needs: infants, elderly, disabled, allergies. Avoid salty foods, as they will make you thirsty.

Water Tips

The best option is to store drinking water prior to a disaster, in appropriate containers. If purified water is not available, water should be boiled for 1 full minute, keeping in mind that some water will evaporate. Let the water completely cool before use.

Sanitation Supplies

- Large plastic trash bags for waste, sanitation, and protection
- Pre-moistened towelettes
- Hand soap and liquid detergent
- Shampoo
- Toothpaste & toothbrush
- Feminine supplies
- Infant supplies
- Toilet paper and paper towels
- Deodorant

Cooking Supplies

- Plastic bags – various sizes, sealable
- Paper plates, plastic utensils, paper towels
- Pots (cooking) – at least two
- Barbecue or gas grill; charcoal and lighter or propane (**for outdoor use only**); Sterno® stove

Family Disaster Plan and Personal Survival Guide

VII. HOME EMERGENCY SUPPLIES (CONTINUED)

Safety Supplies

- Knife, razor blade, and multipurpose tool
- Clothes – complete change for each family member
(Preferably long pants and long sleeves for protection)
- Heavy gloves for each adult
- Heavy shoes for each family member

Pet Supplies

- Carrier
- Food
- Medications
- Important documents such as vaccination records and license information
- Collar with ID tag and harness or leash
- Water
- Sanitation items – Litter and litter box if appropriate

Car Survival Kit

- Non-perishable food
- Flares
- Bottled water
- First Aid Kit and Manual
- Fire extinguisher
- Blanket
- Sealable plastic bags
- Flashlight with batteries
- Tools and rubber hose
- Critical medications
- Pre-moistened towelettes and tissues
- Extra clothing

VIII. IMPORTANT TELEPHONE NUMBERS

USE "9-1-1" FOR LIFE THREATENING EMERGENCIES ONLY

NON-EMERGENCY FIRE DEPARTMENT: _____

NON-EMERGENCY LAW ENFORCEMENT AGENCY: _____

PRIMARY DOCTOR: _____

GAS COMPANY: _____

ELECTRIC COMPANY: _____

WATER COMPANY: _____

OUT-OF-STATE CONTACT: _____

POISON CONTROL: 1-800-222-1222 _____

OTHER: _____



Family Disaster Plan and Personal Survival Guide

IX. PRACTICE YOUR PLAN AS A FAMILY

- A.** Practice helps people feel less disoriented and better organized in case of a disaster – even in the middle of the night.
- B.** Make sure your family knows where to locate fire extinguishers, gas and water valves, and the main circuit breaker.
- C.** Update your Family Disaster Plan every year.
- Verify the telephone numbers and personal information of everyone listed in the plan.
 - Print updated copies for all the members of your family.
- D.** In case of emergency, you should know the school’s disaster plan.
- Determine what is required to release your child to your representatives if you cannot get there yourself.
 - Ensure that the school knows your current contact information and those people authorized to pick up your child.
- E.** Check the contents of your emergency kits.
- Change the batteries in your flashlights and portable radio; replace spare batteries.
 - Replenish your emergency kits. Replace bottled water; ensure that all food is still safe to eat and that medications have not expired.

Every family member should carry a copy of this important information:

EMERGENCY CONTACT INFORMATION
Out-of-State Contact
Name: _____
Telephone: _____
Neighborhood Meeting Place: _____
Out-of-Area Meeting Place: _____
Call 2-1-1 for disaster information such as shelters, road closures, affected areas, and recovery and relief programs.

EMERGENCY CONTACT INFORMATION
Out-of-State Contact
Name: _____
Telephone: _____
Neighborhood Meeting Place: _____
Out-of-Area Meeting Place: _____
Call 2-1-1 for disaster information such as shelters, road closures, affected areas, and recovery and relief programs.

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Call 2-1-1 for disaster information such as shelters, road closures, affected areas, and recovery and relief programs.

EMERGENCY CONTACT INFORMATION
Out-of-State Contact
Name: _____
Telephone: _____
Neighborhood Meeting Place: _____
Out-of-Area Meeting Place: _____
Call 2-1-1 for disaster information such as shelters, road closures, affected areas, and recovery and relief programs.

Family Disaster Plan and Personal Survival Guide

NOTICE:

The information presented in this brochure is believed to be accurate and of practical value in preparing for a disaster, however, no guarantee can be given that the guidance presented will provide protection.

The County of San Diego, the San Diego County Office of Emergency Services, the Unified San Diego County Emergency Services Organization, the Unified Disaster Council and each organization's officers, employees, and agents, assume no legal liability for the accuracy, completeness, or usefulness of any information, product, or process disclosed herein, or for any injuries or damages arising from any disaster or occurrence giving rise to the use or application of the information, products or processes described or disclosed herein.



County of San Diego Office of Emergency Services

Phone: (858) 565-3490

Website: www.ReadySanDiego.org

San Diego County Board of Supervisors

Greg Cox
District 1

Dianne Jacob
District 2

Dave Roberts
District 3

Ron Roberts
District 4

Bill Horn
District 5

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PREPAREDNESS STARTS WITH YOU!

SAN DIEGO COUNTY OFFICE OF EMERGENCY SERVICES
www.ReadySanDiego.org
858-565-3490



Family Disaster Plan and Personal Survival Guide Checklist

FAMILIES SHOULD PLAN ON BEING SELF-SUFFICIENT FOR A MINIMUM OF THREE DAYS (72 HOURS) AFTER A DISASTER.

Emergency Supplies for Family:

- First Aid Kit
- Portable Radio/Batteries
- Flashlight/Batteries
- Water (1 gal. per person, per day)
- Food
- Sanitation/Hygiene Supplies
 - Portable Potty/Bucket
 - Supply of Plastic Bags
 - Toilet Paper
- Fire Extinguisher
- Blankets
- Tools
- Sturdy Shoes
- Cooking Equipment
- Prescription Glasses
- Prescription Medications
- Clothes
- Can Opener (Non-electric)
- Matches/Candles
- Baby Supplies

Family Knows Where to Find These Important Telephone Numbers:

- Fire
- Police
- Medical
- Physician
- Gas Company
- Electric Company
- Water Company

Know Location of:

- Main Electrical Circuit Breaker
- Gas Valve
- Wrench for Gas Valve
- Main Water Valve

Reunion Locations Identified:

- At home
- Away from home
- Out of Area Contact Identified and Discussed

Car Survival Kit:

- Food
- Bottled Water
- First Aid Kit
- Flashlight/Batteries
- Prescription Medications
- Blankets
- Tools
- Pre-moistened Towelettes
- Sealable Plastic Bags
- Sturdy Shoes

Miscellaneous Supplies:

- Provisions for Pets
- Important Documents
- Gloves (Safety and Latex)
- Duct Tape

Student Name: _____ Parent or Guardian Signature: _____
Telephone: _____ (Optional) School Name: _____

OFICINA DE EMERGENCIAS DEL CONDADO DE SAN DIEGO
www.ReadySanDiego.org
858-565-3490



Lista de Verificación del Plan Familiar de Desastres y Guía Personal Para Sobrevivir

FAMILIAS DEBEN DE TENER UN PLAN PARA PODER SOBREVIVIR POR LO MENOS TRES DIAS (72 HORAS) DESPUES DE UN DESASTRE.

Provisiones de Emergencia Para la Familia:

- Botiquín de Primeros Auxilios
- Radio Portátil/Baterías
- Linterna/Baterías
- Agua (1 GAL. Por persona, por día)
- Comida
- Saneamiento/ Suministros Higiénicos
 - Orinal Portátil/Cubeta
 - Bolsas de Plástico
 - Papel de Baño
- Extintor de Fuego
- Cobijas
- Herramienta
- Zapatos Firmes
- Útiles para cocinar
- Gafas/Lentes de Prescripción
- Medicamentos
- Ropa
- Abre Latas (Que no sea Eléctrico)
- Cerillos/Velas
- Productos para Bebes

Números de Teléfonos Importantes que Familias Deberían saber donde encontrar:

- Bomberos
- Policía
- Medical
- Medico
- Compañía de Gas
- Compañía de Electricidad
- Compañía de Agua

Saber Ubicación de:

- Cortacircuitos Eléctrico Principal
- Válvula de Gas
- Llave Inglesa para Válvula de Gas
- Válvula Principal para el Agua

Ubicaciones de Reunión:

- En Casa
- Lejos de Casa
- Fuera del Área Identificada y Discutida

Botiquín de Carro para Sobrevivir:

- Comida
- Agua Embotellada
- Botiquín de Primeros Auxilios
- Linterna/Baterías
- Medicamentos
- Cobijas
- Herramientas
- Toallitas Humedecidas
- Bolsas de Plástico
- Zapatos Firmes

Suministros:

- Provisiones para Mascotas
- Documentos Importantes
- Guantes (De Seguridad y Látex)
- Cinta De Goma

Nombre del Estudiante: _____ Firma del Padre/Guardián: _____
Teléfono: _____ (Opcional) Nombre de Escuela: _____

APPENDIX C
San Diego Road Capacity Data

APPENDIX C Road Capacity Guide

Roadway Classifications, Levels of Service (LOS) and Average Daily Traffic (ADT)

STREET CLASSIFICATION	LANES	CROSS SECTIONS	LEVEL OF SERVICE				
			A	B	C	D	E
Freeway	8 lanes		60,000	84,000	120,000	140,000	150,000
Freeway	6 lanes		45,000	63,000	90,000	110,000	120,000
Freeway	4 lanes		30,000	42,000	60,000	70,000	80,000
Expressway	6 lanes	102/122	30,000	42,000	60,000	70,000	80,000
Primary Arterial	6 lanes	102/122	25,000	35,000	50,000	55,000	60,000
Major Arterial	6 lanes	102/122	20,000	28,000	40,000	45,000	50,000
Major Arterial	4 lanes	78/98	15,000	21,000	30,000	35,000	40,000
Collector	4 lanes	72/92	10,000	14,000	20,000	25,000	30,000
Collector (no center lane) continuous left-turn lane)	4 lanes 2 lanes	64/84 50/70	5,000	7,000	10,000	13,000	15,000
Collector (no fronting property)	2 lanes	40/60	4,000	5,500	7,500	9,000	10,000
Collector (commercial-industrial fronting)	2 lanes	50/70	2,500	3,500	5,000	6,500	8,000
Collector (multifamily)	2 lanes	40/60	2,500	3,500	5,000	6,500	8,000
Sub-Collector (single-family)	2 lanes	36/56	—	—	2,200	—	—

APPENDIX C (Continued)

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