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City of Roseville
2011 Multi-Hazard Mitigation Plan

**APPENDIX A.
ACRONYMS AND DEFINITIONS**

December 2010

APPENDIX A. ACRONYMS AND DEFINITIONS

ACRONYMS

CalEMA—California Emergency Management Agency
CAL FIRE—California Department of Forestry and Fire Protection
CBC—California Building Code
CCR—California Code of Regulations
CEQA—California Environmental Quality Act
CIP—Capital Improvements Plan
CFR—Code of Federal Regulations
cfs—cubic feet per second
CPTED—Crime Prevention Through Environmental Design
CRS—Community Rating System
CUPA—Certified Unified Program Agency
DFIRM—Digital Flood Insurance Rate Map
DHS—Department of Homeland Security
DMA —Disaster Mitigation Act
DWR—Department of Water Resources
EOC—Emergency Operations Center
EOP—Emergency Operations Plan
EPA—U.S. Environmental Protection Agency
ESA—Endangered Species Act
EUD—Environmental Utilities District
FEMA—Federal Emergency Management Agency
FIRM—Flood Insurance Rate Map
FIS—Flood Insurance Study
GIS—Geographic Information System
HAZUS-MH—Hazards, United States-Multi Hazard
HMGP—Hazard Mitigation Grant Program
IBC—International Building Code
LHMP—Local Hazard Mitigation Plan
MCE—Maximum Credible Earthquakes
MCI—Multi-Casualty Incident
MM—Modified Mercalli Scale
MND— Mitigated Negative Declaration
NEHRP—National Earthquake Hazards Reduction Program

NFIP—National Flood Insurance Program
NOAA—National Oceanic and Atmospheric Administration
OES—Office of Emergency Services
PCFCD—Placer County Flood Control District
PCWA—Placer County Water Agency
PDM—Pre-Disaster Mitigation Grant Program
PDSI—Palmer Drought Severity Index
PHDI—Palmer Hydrological Drought Index
PFE—Pacific Fruit Express
PGA—Peak Ground Acceleration
RMC—Roseville Municipal Code
SARS—Severe acute respiratory syndrome
SEMS—Standardized Emergency Management System
SFHA—Special Flood Hazard Area
SJWD—San Juan Water District
SPI—Standardized Precipitation Index
STEMI—ST-elevation myocardial infarction
UBC—Uniform Building Code
USBR—U.S. Bureau of Reclamation
USGS—United States Geological Survey
VHF—Viral Hemorrhagic Fevers
WMD—Weapon of Mass Destruction
WNV—West Nile Virus

DEFINITIONS

100-Year Flood: The term “100-year flood” can be misleading. The 100-year flood does not necessarily occur once every 100 years. Rather, it is the flood that has a 1 percent chance of being equaled or exceeded in any given year.. Thus, the 100-year flood could occur more than once in a relatively short period of time. The Federal Emergency Management Agency (FEMA) defines it as the 1 percent annual chance flood, which is now the standard definition used by most federal and state agencies and by the National Flood Insurance Program (NFIP).

Acre-Foot: An acre-foot is the amount of water it takes to cover 1 acre to a depth of 1 foot. This measure is used to describe the quantity of storage in a water reservoir. An acre-foot is a unit of volume. One acre foot equals 7,758 barrels; 325,829 gallons; or 43,560 cubic feet. An average household of four will use approximately 1 acre-foot of water per year.

Act of Terrorism: According to the Federal Bureau of Investigation (FBI), an act of terrorism is “a violent act or an act dangerous to human life, in violation of the criminal laws of the United States or of any state, to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social goals.” Acts of terrorism are intentional, criminal, and malicious and can be foreign or domestic, depending on the origin, base, and objectives of the terrorist or organization. Acts of terrorism can involve the use of weapons of mass destruction, arson, and incendiary, explosive, and

armed attacks; industrial sabotage and intentional hazardous materials releases; agro-terrorism; and cyber-terrorism.

Asset: An asset is any man-made or natural feature that has value, including, but not limited to, people; buildings; infrastructure, such as bridges, roads, sewers, and water systems; lifelines, such as electricity and communication resources; and environmental, cultural, or recreational features such as parks, wetlands, and landmarks.

Base Flood: The flood having a 1% chance of being equaled or exceeded in any given year, also known as the “100-year” or “1% chance” flood. The base flood is a statistical concept used to ensure that all properties subject to the National Flood Insurance Program (NFIP) are protected to the same degree against flooding.

Basin: A basin is the area within which all surface water – whether from rainfall, snowmelt, springs, or other sources – flows to a single water body or watercourse. The boundary of a river basin is defined by natural topography, such as hills, mountains, and ridges. Basins are also referred to as “watersheds” and “drainage basins.”

Benefit: A benefit is a net project outcome and is usually defined in monetary terms. Benefits may include direct and indirect effects. For the purposes of benefit-cost analysis of proposed mitigation measures, benefits are limited to specific, measurable, risk reduction factors, including reduction in expected property losses (buildings, contents, and functions) and protection of human life.

Benefit/Cost Analysis: A benefit/cost analysis is a systematic, quantitative method of comparing projected benefits to projected costs of a project or policy. It is used as a measure of cost effectiveness.

Benioff Earthquake: Sometimes called “deep quakes,” these occur in the Pacific Northwest when the Juan de Fuca plate breaks up underneath the continental plate, approximately 30 miles beneath the earth’s surface.

Building: A building is defined as a structure that is walled and roofed, principally aboveground, and permanently fixed to a site. The term includes manufactured homes on permanent foundations on which the wheels and axles carry no weight.

Capability Assessment: A capability assessment provides a description and analysis of a community’s current capacity to address threats associated with hazards. The assessment includes two components: an inventory of an agency’s mission, programs, and policies, and an analysis of its capacity to carry them out. A capability assessment is an integral part of the planning process in which a community’s actions to reduce losses are identified, reviewed, and analyzed, and the framework for implementation is identified. The following capabilities were reviewed under this assessment:

- Legal and regulatory capability
- Administrative and technical capability
- Fiscal capability

Certified Unified Program Agency (CUPA): The City of Roseville is a State of California-designated CUPA certified to act as a licensing agency for six hazardous materials-related programs. The CUPA enables the City of Roseville to implement its own hazardous materials emergency response program. Mutual aid agreements are also in place for incident response. Each business that deals with hazardous materials generally must submit a Unified Program Consolidated Form with facility information to the Roseville Fire Department.

Civil Disorder: Civil disorder results from incidents intended to disrupt a community to the degree that law enforcement intervention is required to maintain public safety. Civil disorder is generally associated with controversial political, judicial, or economic issues and events and may occur at any time, although statistics indicate that civil disorder is more frequent during the summer months. Although the City of Roseville does not have a history of civil disorder or rioting, large public gatherings, often associated with concerts or sports events, have overburdened local law enforcement and fire protection resources in the past. The effects of civil disorder and riots vary and depend on the type of event and its severity, scope, and duration. Essential services (such as electricity, water, public transportation, and communications) may be disrupted, and property damage, injuries, and loss of life may occur.

Communicable Disease: For the purposes of this plan, communicable diseases include severe acute respiratory syndrome (SARS), flu, small pox, and diseases carried by insects. Diseases carried by insects include plague (fleas), encephalitis, malaria, West Nile virus (mosquitoes), and Lyme disease (ticks).

Community Rating System (CRS): The CRS is a voluntary program under the NFIP that rewards participating communities (provides incentives) for exceeding the minimum requirements of the NFIP and completing activities that reduce flood hazard risk by providing flood insurance premium discounts.

Critical Facility: A critical facility is vital to the City's ability to provide essential services and protect life and property. Loss of a critical facility would result in a severe economic or catastrophic impact. Under the Roseville hazard mitigation plan definition, critical facilities include the following:

- Police stations, fire stations, vehicle and equipment storage facilities, and emergency operations centers needed for disaster response before, during, and after hazard events
- Public and private utilities and infrastructure vital to maintaining or restoring normal services to areas damaged by hazard events
- Hospitals, nursing homes, and housing likely to contain occupants who may not be sufficiently mobile to avoid death or injury during a hazard event
- Structures or facilities that produce, use, or store highly volatile, flammable, explosive, toxic, and/or water-reactive materials

Cubic Feet per Second (cfs): A cubic foot can be visualized as a box measuring 1 by 1 by 1 foot. The U.S. Geological Services (USGS) defines a cfs as "the flow rate or discharge equal to one cubic foot of water per second or about 7.5 gallons per second." The rate of flow of a creek, river, or flood is measured by quantity over time and is often referred to as "discharge," or the rate at which a volume of water passes a given point in a given amount of time. Discharge and river flow are often measured in terms of cfs.

Crustal Earthquake: Crustal quakes occur at a depth of 5 to 10 miles beneath the earth's surface and are associated with fault movement within a surface plate.

Dam: A dam is any artificial barrier or controlling mechanism that can or does impound 10 acre-feet or more of water.

Dam Failure: Dam failure refers to a partial or complete breach in a dam (or levee) that impacts its integrity. Dam failures occur for a number of reasons, such as flash flooding, inadequate spillway size, mechanical failure of valves or other equipment, freezing and thawing cycles, earthquakes, and intentional destruction.

Debris Avalanche: Volcanoes are prone to debris and mountain rock avalanches that can approach speeds of 100 mph.

Debris Flow: Dense mixtures of water-saturated debris that move down-valley; looking and behaving much like flowing concrete. They form when loose masses of unconsolidated material are saturated, become unstable, and move down slope. The source of water varies but includes rainfall, melting snow or ice, and glacial outburst floods.

Debris Slide: Debris slides consist of unconsolidated rock or soil that has moved rapidly down slope. They occur on slopes greater than 65 percent.

Depth of Flooding: The depth of flooding is difference between regulatory flood elevation and the elevation of the lowest grade adjacent to a structure.

Disaster Mitigation Act of 2000 (DMA); The DMA is Public Law 106-390 and is the latest federal legislation enacted to encourage and promote proactive, pre-disaster planning as a condition of receiving financial assistance under the Robert T. Stafford Act. The DMA emphasizes planning for disasters before they occur. Under the DMA, a pre-disaster hazard mitigation program and new requirements for the national post-disaster hazard mitigation grant program (HMGP) were established.

Drainage Basin: A basin is the area within which all surface water (whether from rainfall, snowmelt, springs, or other sources) flows to a single water body or watercourse. The boundary of a river basin is defined by natural topography, such as hills, mountains, and ridges. Drainage basins are also referred to as “watersheds” and “basins.” The City of Roseville is located within portions of two major drainage basins: the Pleasant Grove Creek Basin and the Dry Creek Basin. Pleasant Grove Creek and its tributaries drain most of the western and central areas of the City, and the Dry Creek Basin and its tributaries drain the remainder of the City. The Dry Creek system has year-round flows in its major watercourses, and the Pleasant Grove Creek system is intermittent, with only seasonal flows. As a result, portions of the City lie within a flood hazard area. However, since 1950, there have been no reports of structural flood damage along Pleasant Grove Creek and there are presently no structures subject to flooding within the Pleasant Grove Creek Basin.

Drought: Drought is a period of time without substantial rainfall or snowfall from one year to the next. Drought can also be defined as the cumulative impacts of several dry years or a deficiency of precipitation over an extended period of time, which in turn results in water shortages for some activity, group, or environmental function. A hydrological drought is caused by deficiencies in surface and subsurface water supplies. A socioeconomic drought impacts the health, well being, and quality of life or starts to have an adverse impact on a region. Drought is a normal, recurrent feature of climate and occurs almost everywhere.

Duration: For the purposes of this plan, duration is defined as the length of time that a hazard occurs. For example, the duration of a tornado can be minutes, but release of a chemical warfare agent such as mustard gas can persist for hours or weeks if unremediated.

Earthquake: An earthquake is defined as a sudden slip on a fault, volcanic or magmatic activity, and sudden stress changes in the earth that result in ground shaking and radiated seismic energy. Earthquakes can last from a few seconds to over 5 minutes, and have been known to occur as a series of tremors over a period of several days. The actual movement of the ground in an earthquake is seldom the direct cause of injury or death. Casualties may result from falling objects and debris as shocks shake, damage, or demolish buildings and other structures.

Exposure: Exposure is defined as the number and dollar value of assets considered to be at risk during the occurrence of a specific hazard.

Extent: The extent is the size of an area affected by a hazard.

Fire Behavior: Fire behavior refers to the physical characteristics of a fire and is a function of the interaction between the fuel characteristics (such as type of vegetation and structures that could burn), topography, and weather. Variables that affect fire behavior include the rate of spread, intensity, fuel consumption, and fire type (such as underbrush versus crown fire).

Fire Frequency: Fire frequency is the broad measure of the rate of fire occurrence in a particular area. An estimate of the areas most likely to burn is based on past fire history or fire rotation in the area, fuel conditions, weather, ignition sources (such as human or lightning), fire suppression response, and other factors.

Flash Flood: A flash flood occurs with little or no warning when water levels rise at an extremely fast rate

Flood Insurance Rate Map (FIRM): FIRMs are the official maps on which the Federal Emergency Management Agency (FEMA) has delineated the Special Flood Hazard Area (SFHA).

Flood Insurance Study: A report published by the Federal Insurance and Mitigation Administration for a community in conjunction with the community's Flood Insurance rate Map. The study contains such background data as the base flood discharges and water surface elevations that were used to prepare the FIRM. In most cases, a community FIRM with detailed mapping will have a corresponding flood insurance study.

Floodplain: Any land area susceptible to being inundated by flood waters from any source. A flood insurance rate map identifies most, but not necessarily all, of a community's floodplain as the Special Flood Hazard Area (SFHA).

Floodway: Floodways are areas within a floodplain that are reserved for the purpose of conveying flood discharge without increasing the base flood elevation more than 1 foot. Generally speaking, no development is allowed in floodways, as any structures located there would block the flow of floodwaters.

Floodway Fringe: Floodway fringe areas are located in the floodplain but outside of the floodway. Some development is generally allowed in these areas, with a variety of restrictions. On maps that have identified and delineated a floodway, this would be the area beyond the floodway boundary that can be subject to different regulations.

Fog: Fog refers to a cloud (or condensed water droplets) near the ground. Fog forms when air close to the ground can no longer hold all the moisture it contains. Fog occurs either when air is cooled to its dew point or the amount of moisture in the air increases. Heavy fog is particularly hazardous because it can restrict surface visibility. Severe fog incidents can close roads, cause vehicle accidents, cause airport delays, and impair the effectiveness of emergency response. Financial losses associated with transportation delays caused by fog have not been calculated in the United States but are known to be substantial.

Freeboard: Freeboard is the margin of safety added to the base flood elevation.

Frequency: For the purposes of this plan, frequency refers to how often a hazard of specific magnitude, duration, and/or extent is expected to occur on average. Statistically, a hazard with a 100-year frequency is expected to occur about once every 100 years on average and has a 1 percent chance of occurring any given year. Frequency reliability varies depending on the type of hazard considered.

Fujita Scale of Tornado Intensity: Tornado wind speeds are sometimes estimated on the basis of wind speed and damage sustained using the Fujita Scale. The scale rates the intensity or severity of tornado events using numeric values from F0 to F5 based on tornado wind speed and damage. An F0 tornado (wind speed less than 73 miles per hour [mph]) indicates minimal damage (such as broken tree limbs), and an F5 tornado (wind speeds of 261 to 318 mph) indicates severe damage.

General Plan: California state law requires that every county and city prepare and adopt a comprehensive long-range plan to serve as a guide for community development. The plan must consist of an integrated and internally consistent set of goals, policies, and implementation measures. In addition, the plan must focus on issues of the greatest concern to the community and be written in a clear and concise manner. City actions, such as those relating to land-use allocation, annexations, zoning, subdivision and design review, redevelopment, and capital improvements, must be consistent with such a plan. The City of Roseville's general plan serves these purposes. As the principle planning document that directs the City's growth and land use, the general plan is as an integral part of the Roseville hazard mitigation plan. A technical update to Roseville's general plan was completed in January 2003.

Goal: A goal is a general guideline that explains what is to be achieved. Goals are usually broad-based, long-term, policy-type statements and represent global visions. Goals help define the benefits that a plan is trying to achieve. The success of the Roseville hazard mitigation plan, once implemented, should be measured by the degree to which its goals have been met (that is, by the actual benefits in terms of actual hazard mitigation).

Geographic Information System (GIS): GIS is a computer software application that relates data regarding physical and other features on the earth to a database for mapping and analysis.

Hazard: A hazard is a source of potential danger or adverse condition that could harm people and/or cause property damage. Natural hazards include floods, winds, and earthquakes. Man-made hazards include acts of terrorism and hazardous material spills.

Hazardous Material: A hazardous material is a substance or combination of substances that (1) can cause or contribute to an increase in mortality or serious irreversible or incapacitating reversible illnesses, or (2) pose a present or potential hazard to human life, property, or the environment. Hazardous materials could cause these effects because of their quantity, concentration, or physical, chemical, or infectious characteristics. Hazardous waste is included in the City's working definition of hazardous material.

Hazardous Material Incident: This type of incident involves the accidental or intentional release of hazardous materials to the environment. Such incidents typically occur as fixed facility incidents or transportation incidents. It is possible to identify and prepare for a fixed facility incident because federal and state laws require facilities to notify state and local authorities about hazardous materials used or produced at the facility. Transportation incidents are more difficult to prepare for because there is little (if any) notice about the materials involved. Except for severe weather and flooding, hazardous materials incidents are the most likely hazards to affect the City of Roseville.

Hazard Mitigation Grant Program (HMGP): Authorized under Section 202 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, the HMGP is administered by FEMA and provides grants to states, tribes, and local governments to implement hazard mitigation actions after a major disaster

declaration. The purpose of the program is to reduce the loss of life and property due to disasters and to enable mitigation activities to be implemented as a community recovers from a disaster

Hazards U.S. Hazard (HAZUS-MH) Loss Estimation Program: HAZUS-MH is a GIS-based program used to support the development of risk assessments as required under the DMA. The HAZUS-MH software program assesses risk in a quantitative manner to estimate damages and losses associated with natural hazards. HAZUS-MH is FEMA's nationally applicable, standardized methodology and software program and contains modules for estimating potential losses from earthquakes, floods, and wind hazards. HAZUS-MH has also been used to assess vulnerability (exposure) for other hazards facing Roseville.

Hydraulics: Hydraulics is the branch of science or engineering that addresses fluids (especially water) in motion in rivers or canals, works and machinery for conducting or raising water, the use of water as a prime mover, and other fluid-related areas.

Hydrology: Hydrology is the analysis of waters of the earth. For example, a flood discharge estimate is developed by conducting a hydrologic study.

Intensity: For the purposes of this plan, intensity refers to the measure of the effects of a hazard.

Inventory: The assets identified in a study region comprise an inventory. Inventories include assets that could be lost when a disaster occurs and community resources are at risk. Assets include people, buildings, transportation, and other valued community resources.

Landslide: Landslides can be described as the sliding movement of masses of loosened rock and soil down a hillside or slope. Fundamentally, slope failures occur when the strength of the soils forming the slope exceeds the pressure, such as weight or saturation, acting upon them.

Large Gathering Places: For the purposes of this plan, such places are defined as follows:

- Any facility listed as a Type A-2.1 in the California Uniform Building Code (UBC) because it has an assembly room with an occupant load of 300 or more without a stage (34 locations in Roseville)
- Any buildings listed as E-1 used for educational purposes through the 12th grade by 50 or more persons for more than 12 hours per week or 4 hours any 1 day (29 buildings in Roseville)
- Any facility likely to have an occupancy of greater than 300, such as a large employment centers, retail centers, cultural centers, and places of worship

Lightning: Lightning is an electrical discharge resulting from the buildup of positive and negative charges within a thunderstorm. When the buildup becomes strong enough, lightning appears as a "bolt," usually within or between clouds and the ground. A bolt of lightning instantaneously reaches temperatures approaching 50,000°F. The rapid heating and cooling of air near lightning causes thunder. Lightning is a major threat during thunderstorms. In the United States, 75 to 100 Americans are struck and killed by lightning each year (see <http://www.fema.gov/hazard/thunderstorms/thunder.shtm>).

Liquefaction: Liquefaction is the complete failure of soils, occurring when soils lose shear strength and flow horizontally. It is most likely to occur in fine grain sands and silts, which behave like viscous fluids when liquefaction occurs. This situation is extremely hazardous to development on the soils that liquefy, and generally results in extreme property damage and threats to life and safety.

Local Government: Any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity.

Magnitude: Magnitude is the measure of the strength of an earthquake, and is typically measured by the Richter scale. As an estimate of energy, each whole number step in the magnitude scale corresponds to the release of about 31 times more energy than the amount associated with the preceding whole number value.

Mass movement: A collective term for landslides, mudflows, debris flows, sinkholes and lahars.

Mitigation: A preventive action that can be taken in advance of an event that will reduce or eliminate the risk to life or property.

Mitigation Actions: Mitigation actions are specific actions to achieve goals and objectives that minimize the effects from a disaster and reduce the loss of life and property.

Nolte Future Floodplain: The Nolte Future Floodplain is the portion of the regulatory floodplain based on the Roseville City of Roseville Floodplain Analysis published by Nolte and Associates in August 1986. This analysis used hydrologic parameters that better represented the observed flooding scenarios that caused flooding in Roseville. The study also used hydrologic parameters based on projected growth for the region assuming total development of the watershed instead of existing conditions used by FEMA. This approach generated a floodplain area greater than that reflected of on the FIRM for portions of Roseville. Although this study was never formally adopted, it is used by the City as the best available information for regulatory and land- use programs such as the specific plan program and improvement standards.

Objective: For the purposes of this plan, an objective is defined as a short-term aim that, when combined with other objectives, forms a strategy or course of action to meet a goal. Unlike goals, objectives are specific and measurable.

Peak Ground Acceleration: Peak Ground Acceleration (PGA) is a measure of the highest amplitude of ground shaking that accompanies an earthquake, based on a percentage of the force of gravity.

Preparedness: Preparedness refers to actions that strengthen the capability of government, citizens, and communities to respond to disasters.

Presidential Disaster Declaration: These declarations are typically made for events that cause more damage than state and local governments and resources can handle without federal government assistance. Generally, no specific dollar loss threshold has been established for such declarations. A Presidential Disaster Declaration puts into motion long-term federal recovery programs, some of which are matched by state programs, designed to help disaster victims, businesses, and public entities.

Probability of Occurrence: The probability of occurrence is a statistical measure or estimate of the likelihood that a hazard will occur. This probability is generally based on past hazard events in the area and a forecast of events that could occur in the future. A probability factor based on yearly values of occurrence is used to estimate probability of occurrence.

Regulatory Floodplain: This term refers to an area regulated by the City of Roseville as floodplain through its land-use regulations and improvement standards. It includes areas identified by FEMA and published on FIRMs and additional areas identified by Roseville as being susceptible to flooding. These areas are delineated based on detailed hydrologic and hydraulic floodplain modeling that meets or exceeds FEMA criteria for mapping and modeling floodplains. The flood event used to delineate these boundaries is referred to as “the regulatory flood” in this plan to differentiate it from the “base flood” used by FEMA. The City of Roseville designates the 100-year floodplain area on its land-use map in accordance with best available floodplain information as determined by the Public Works Director. In many portions of the City, the Nolte Future Floodplain (May 1987) has been used to designate floodplain boundaries. When Nolte Future Floodplain information does not exist or does not represent the best available information, new floodplain information is generated by the project proponent. New floodplain information is generally developed (1) consistent with build-out development assumptions used by the Nolte Future Floodplain analysis, and (2) in compliance with the most recent Placer County floodplain manual. Floodplain boundaries can normally be terminated where the 100-year floodplain narrows to a width of 200 feet or less and where the associated drainage area is less than 300 acres. Precise termination of boundaries must be approved by the Public Works Director.

Repetitive Loss Property: Any NFIP-insured property that, since 1978 and regardless of any changes of ownership during that period, has experienced:

- Four or more paid flood losses in excess of \$1000.00; or
- Two paid flood losses in excess of \$1000.00 within any 10-year period since 1978 or
- Three or more paid losses that equal or exceed the current value of the insured property.

Return Period (or Mean Return Period): This term refers to the average period of time in years between occurrences of a particular hazard (equal to the inverse of the annual frequency of occurrence).

Riverine: Of or produced by a river. Riverine floodplains have readily identifiable channels. Floodway maps can only be prepared for riverine floodplains.

Risk: Risk is the estimated impact that a hazard would have on people, services, facilities, and structures in a community. Risk measures the likelihood of a hazard occurring and resulting in an adverse condition that causes injury or damage. Risk is often expressed in relative terms such as a high, moderate, or low likelihood of sustaining damage above a particular threshold due to occurrence of a specific type of hazard. Risk also can be expressed in terms of potential monetary losses associated with the intensity of the hazard.

Risk Assessment: Risk assessment is the process of measuring potential loss of life, personal injury, economic injury, and property damage resulting from hazards. This process assesses the vulnerability of people, buildings, and infrastructure to hazards and focuses on (1) hazard identification; (2) impacts of hazards on physical, social, and economic assets; (3) vulnerability identification; and (4) estimates of the cost of damage or costs that could be avoided through mitigation.

Risk Ranking: This ranking serves two purposes, first to describe the probability that a hazard will occur, and second to describe the impact a hazard will have on the people, property, and economy of Roseville. Risk estimates for the City are based on the methodology that the City used to prepare the risk assessment for this plan. The following equation shows the risk ranking calculation:

$$\text{Risk Ranking} = \text{Probability} + \text{Impact (people + property + economy)}$$

Robert T. Stafford Act: The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 100-107, was signed into law on November 23, 1988. This law amended the Disaster Relief Act of 1974, Public Law 93-288. The Stafford Act is the statutory authority for most federal disaster response activities, especially as they pertain to FEMA and its programs.

Sinkhole: A collapse depression in the ground with no visible outlet. Its drainage is subterranean. It is commonly vertical-sided or funnel-shaped.

Slab: This refers to one or more layers of snow in which the grains are bonded together. A slab initially fails over a large area instead of at a single point.

Special Flood Hazard Area: The base floodplain delineated on a Flood Insurance Rate Map. The SFHA is mapped as a Zone A in riverine situations and zone V in coastal situations. The SFHA may or may not encompass all of a community's flood problems

Stakeholder: Business leaders, civic groups, academia, non-profit organizations, major employers, managers of critical facilities, farmers, developers, special purpose districts, and others whose actions could impact hazard mitigation.

Steering Committee: The Steering Committee is the Roseville City Council-approved group that oversaw all phases of the hazard mitigation plan's development. The members of this committee included key city personnel, citizens, and other stakeholders from within the planning area.

Stream Bank Erosion: Stream bank erosion is common along rivers, streams and drains where banks have been eroded, sloughed or undercut. However, it is important to remember that a stream is a dynamic and constantly changing system. It is natural for a stream to want to meander, so not all eroding banks are "bad" and in need of repair. Generally, stream bank erosion becomes a problem where development has limited the meandering nature of streams, where streams have been channelized, or where stream bank structures (like bridges, culverts, etc.) are located in places where they can actually cause damage to downstream areas. Stabilizing these areas can help protect watercourses from continued sedimentation, damage to adjacent land uses, control unwanted meander, and improvement of habitat for fish and wildlife.

Steep Slope: Different communities and agencies define it differently, depending on what it is being applied to, but generally a steep slope is a slope in which the percent slope equals or exceeds 25%. For this study, steep slope is defined as slopes greater than 33%.

Subduction Zone Earthquake: This type of quake occurs along two converging plates, attached to one another along their interface. When the interface between these two plates slips, a sudden, dramatic release of energy results, propagated along the entire fault line.

Sustainable Hazard Mitigation: This concept includes the sound management of natural resources, local economic and social resiliency, and the recognition that hazards and mitigation must be understood in the largest possible social and economic context.

Technical Subcommittee: This City of Roseville group convened to provide guidance, support, and feedback to the planning team during all phases of Roseville hazard mitigation plan development. The technical subcommittee consisted of key staff from City departments integral to implementing City programs pertinent to hazard mitigation.

Technological Hazard: A technological hazard arises from human activities such as the manufacture, transportation, storage, and use of hazardous materials. Technological hazards are assumed to be accidental in nature, with unintended consequences.

Thunderstorm: A thunderstorm is a storm with lightning and thunder produced by cumulonimbus clouds. Thunderstorms usually produce gusty winds, heavy rains, and sometimes hail. Thunderstorms are usually short in duration (seldom more than 2 hours). Heavy rains associated with thunderstorms can lead to flash flooding during the wet or dry seasons.

Tornado: A tornado is a violently rotating column of air extending between and in contact with a cloud and the surface of the earth. Tornadoes are often (but not always) visible as funnel clouds. On a local scale, tornadoes are the most intense of all atmospheric circulations, and winds can reach destructive speeds of more than 300 mph. A tornado's vortex is typically a few hundred meters in diameter, and damage paths can be up to 1 mile wide and 50 miles long.

Vulnerability: Vulnerability describes how exposed or susceptible an asset is to damage. Vulnerability depends on an asset's construction, contents, and the economic value of its functions. Like indirect damages, the vulnerability of one element of the community is often related to the vulnerability of another. For example, many businesses depend on uninterrupted electrical power. Flooding of an electric substation would affect not only the substation itself but businesses as well. Often, indirect effects can be much more widespread and damaging than direct effects.

Water Supply Strategy: A water supply strategy is a comprehensive approach to ensure water reliability for Roseville's customers. The City has a diverse set of water supply options, including surface water contracts, recycled water, and groundwater wells to ensure that even after a period of dry years, a combination of available water supplies and water conservation measures will ensure that the community has adequate water. The City has contracts for surface water with three agencies

Watershed: A watershed is an area that drains downgradient from areas of higher land to areas of lower land to the lowest point, a common drainage basin.

Weapon of Mass Destruction (WMD): WMDs include chemical, biological, radiological, nuclear, and explosive weapons associated with terrorism.

West Nile Virus: West Nile virus is a recent natural hazard affecting California. Mosquitoes transmit this potentially deadly disease to livestock and humans alike. West Nile virus first struck the northern hemisphere in Queens, New York, in 1999 and killed four people. In 2003, all 50 states warned of an outbreak from any of the 30 mosquito species known to carry it. From 62 severe cases in 1999, confirmed human cases of the virus spread to 39 states in 2002 and killed 284 people. Less than 1 percent of those infected develop severe illness. People over 50 years of age appear to be at high risk for the severe aspects of the disease.

Wildfire: These terms refer to any uncontrolled fire occurring on undeveloped land that requires fire suppression. The potential for wildfire is influenced by three factors: the presence of fuel, topography, and air mass. Fuel can include living and dead vegetation on the ground, along the surface as brush and small trees, and in the air such as tree canopies. Topography includes both slope and elevation. Air mass includes temperature, relative humidity, wind speed and direction, cloud cover, precipitation amount, duration, and the stability of the atmosphere at the time of the fire. Wildfires can be ignited by lightning and, most frequently, by human activity including smoking, campfires, equipment use, and arson.

Windstorm: Windstorms are generally short-duration events involving straight-line winds or gusts exceeding 50 mph. These gusts can produce winds of sufficient strength to cause property damage. Windstorms are especially dangerous in areas with significant tree stands, exposed property, poorly constructed buildings, mobile homes (manufactured housing units), major infrastructure, and aboveground utility lines. A windstorm can topple trees and power lines; cause damage to residential, commercial, critical facilities; and leave tons of debris in its wake.

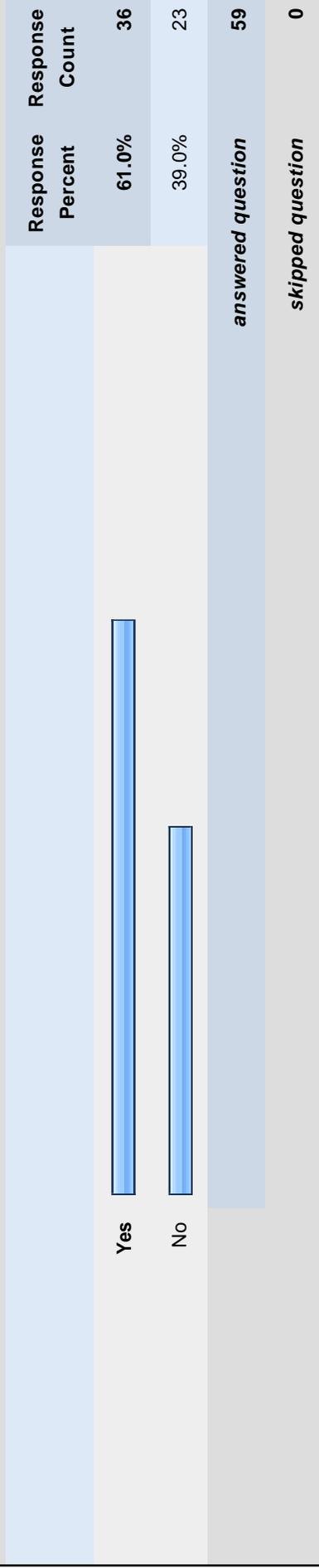
Zoning Ordinance: The zoning ordinance designates allowable land use and intensities for a local jurisdiction. Zoning ordinances consist of two components: a zoning text and a zoning map.

City of Roseville
2011 Multi-Hazard Mitigation Plan

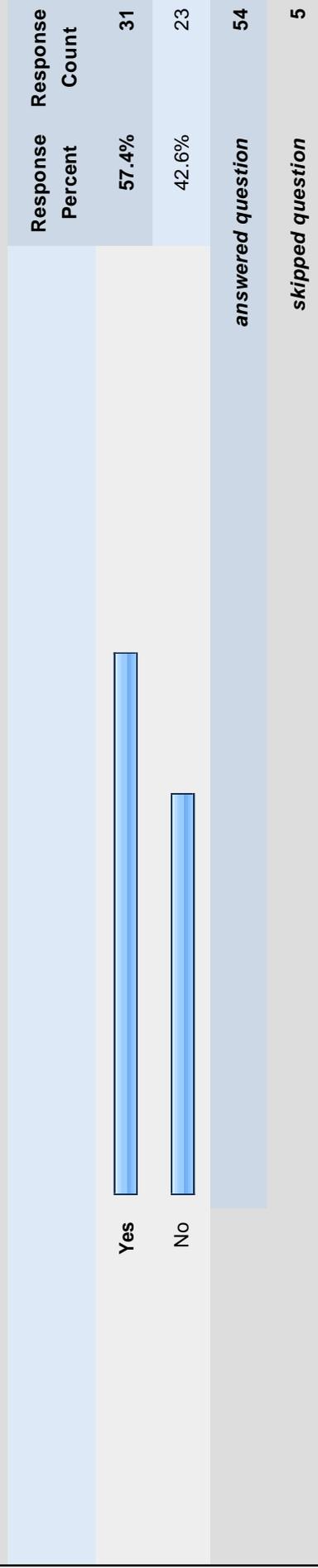
APPENDIX B.
PUBLIC INVOLVEMENT QUESTIONNAIRE RESULTS

December 2010

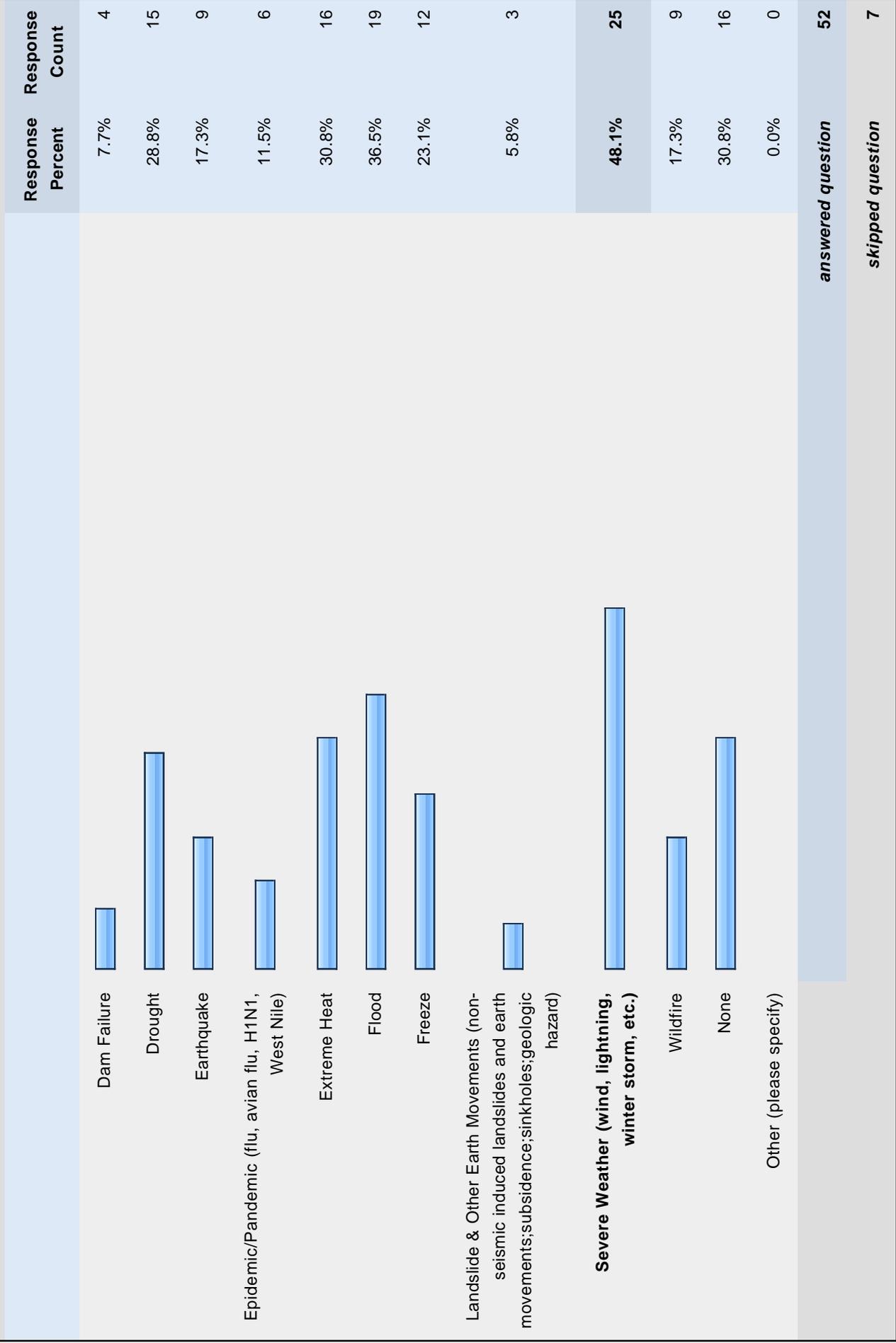
1. Do you live in Roseville?



2. Do you work in Roseville?



3. Which of the following natural hazard events have you or has anyone in your household experienced in the past 25 years within Roseville? (Check all that apply)



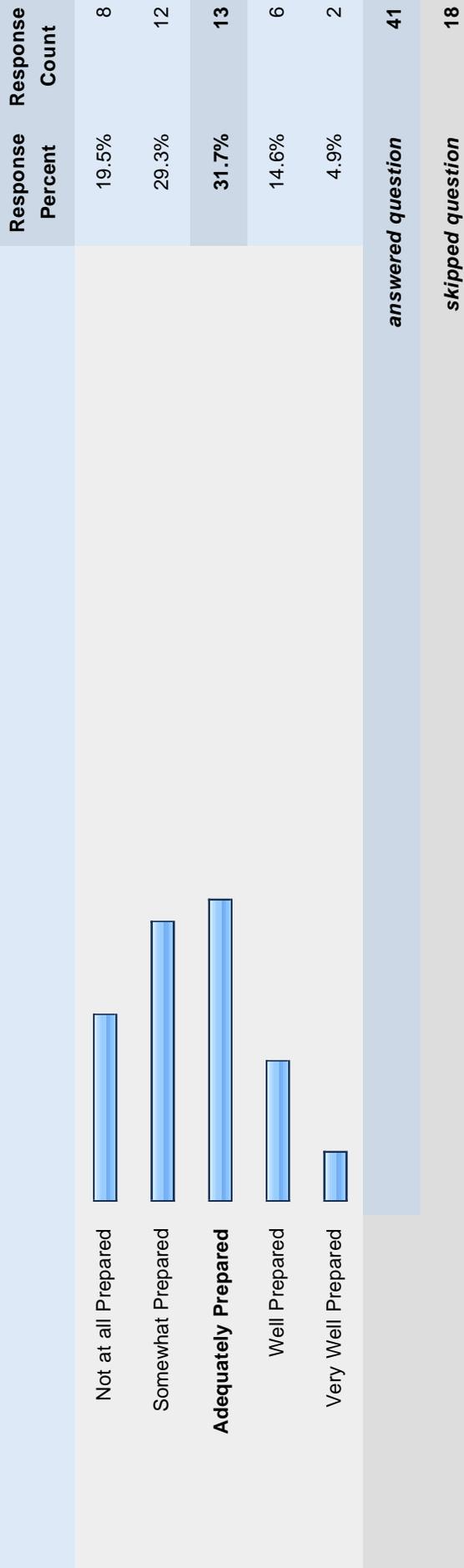
4. How concerned are you about the following natural hazards in Roseville? (Please check one for each hazard)

	Not concerned	Somewhat concerned	Concerned	Very concerned	Extremely concerned	Rating Average	Response Count
Dam Failure	37.0% (10)	7.4% (2)	18.5% (5)	11.1% (3)	25.9% (7)	2.81	27
Drought	33.3% (9)	14.8% (4)	25.9% (7)	14.8% (4)	11.1% (3)	2.56	27
Earthquake	28.0% (7)	28.0% (7)	32.0% (8)	4.0% (1)	8.0% (2)	2.36	25
Epidemic/Pandemic (flu, avian flu, H1N1, West Nile)	17.4% (4)	26.1% (6)	30.4% (7)	17.4% (4)	8.7% (2)	2.74	23
Extreme Heat	25.9% (7)	22.2% (6)	29.6% (8)	18.5% (5)	3.7% (1)	2.52	27
Flood	18.5% (5)	14.8% (4)	29.6% (8)	25.9% (7)	11.1% (3)	2.96	27
Freeze	50.0% (13)	23.1% (6)	23.1% (6)	3.8% (1)	0.0% (0)	1.81	26
Landslide & Other Earth Movements (non-seismic induced landslides and earth movements;subsidence;sinkholes;geologic hazard)	64.3% (18)	10.7% (3)	21.4% (6)	3.6% (1)	0.0% (0)	1.64	28
Severe Weather (wind, lightning, winter storm, etc.)	22.2% (6)	22.2% (6)	25.9% (7)	22.2% (6)	7.4% (2)	2.70	27
Wildfire	27.3% (9)	24.2% (8)	33.3% (11)	6.1% (2)	9.1% (3)	2.45	33
						answered question	41
						skipped question	18

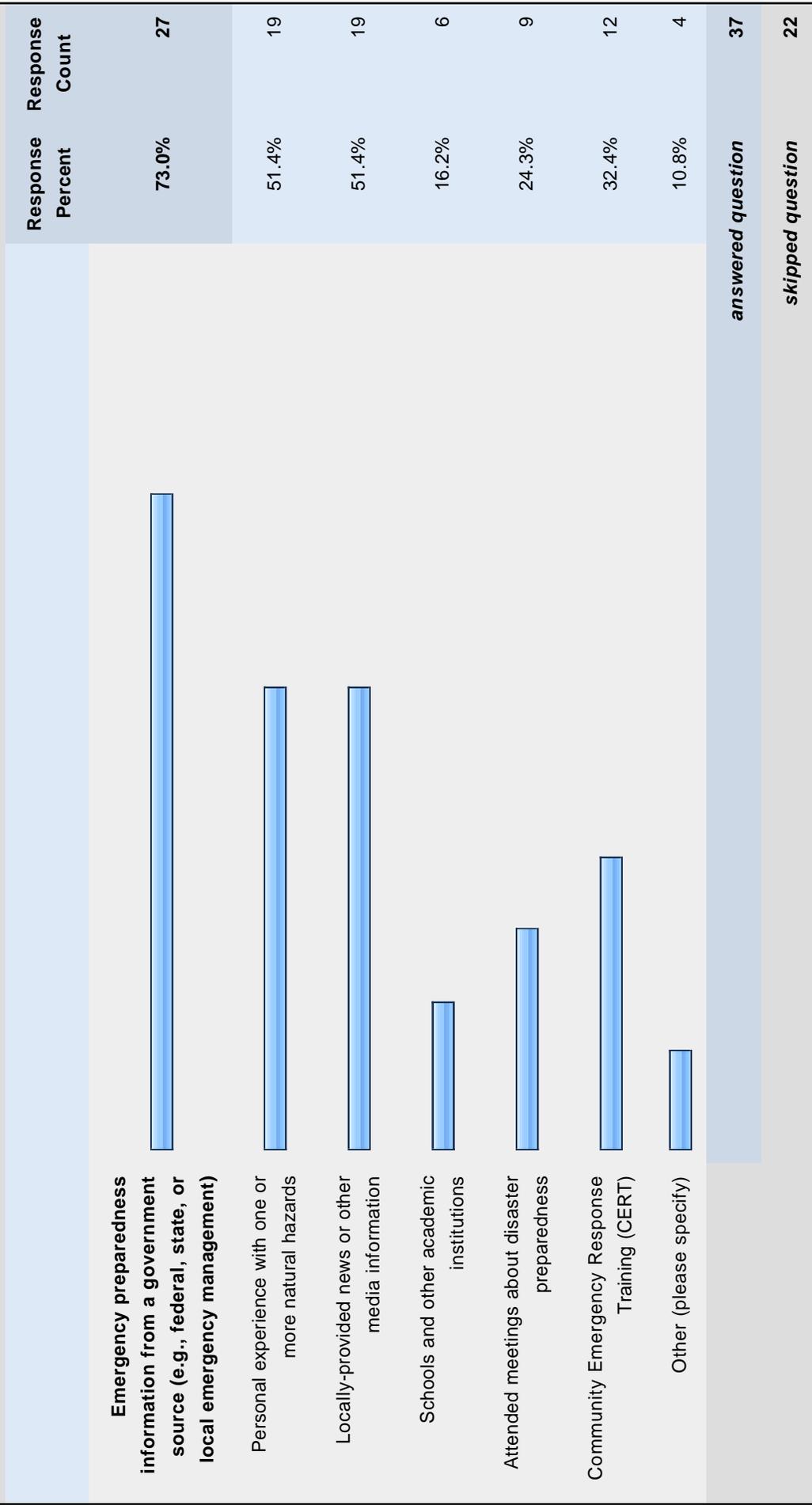
5. How concerned are you with the following manmade hazards in Roseville? (Check all that apply)

	Not concerned	Somewhat concerned	Concerned	Very concerned	Extremely concerned	Rating Average	Response Count
Energy Shortage	29.6% (8)	29.6% (8)	18.5% (5)	14.8% (4)	7.4% (2)	2.41	27
Act of Terrorism	25.0% (5)	20.0% (4)	25.0% (5)	10.0% (2)	20.0% (4)	2.80	20
Hazardous Materials Release	10.5% (2)	21.1% (4)	15.8% (3)	31.6% (6)	21.1% (4)	3.32	19
Other Human-Caused Hazard (civil unrest; data or telecommunications;explosion;infrastructure/utility failure;jail event;urban fire;technological failure;transportation incident including train and airplane;unexploded munitions;arson/commercial fire and others)	11.8% (4)	23.5% (8)	32.4% (11)	26.5% (9)	5.9% (2)	2.91	34
						answered question	41
						skipped question	18

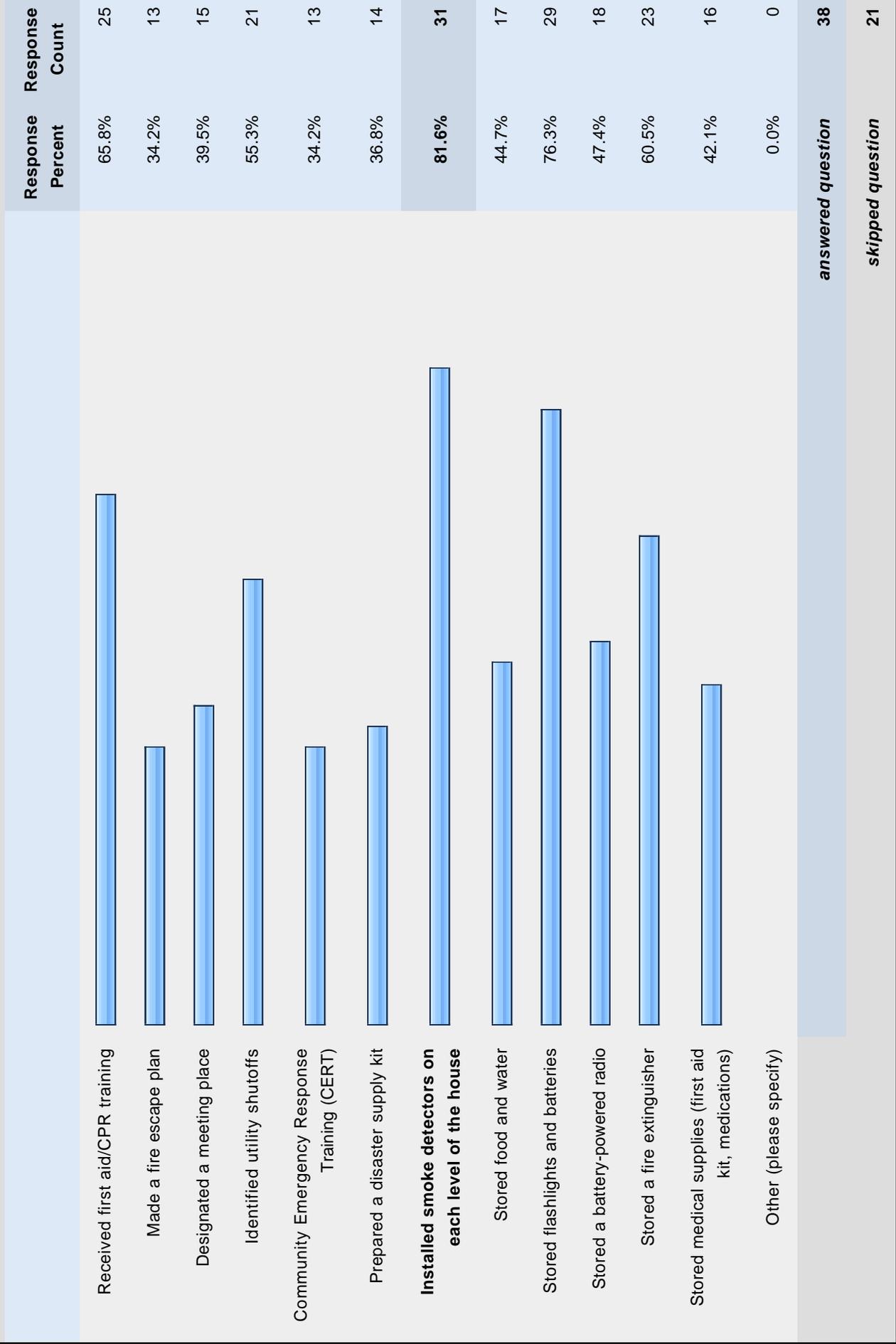
6. How prepared is your household for a natural or manmade hazard event? (Check one)



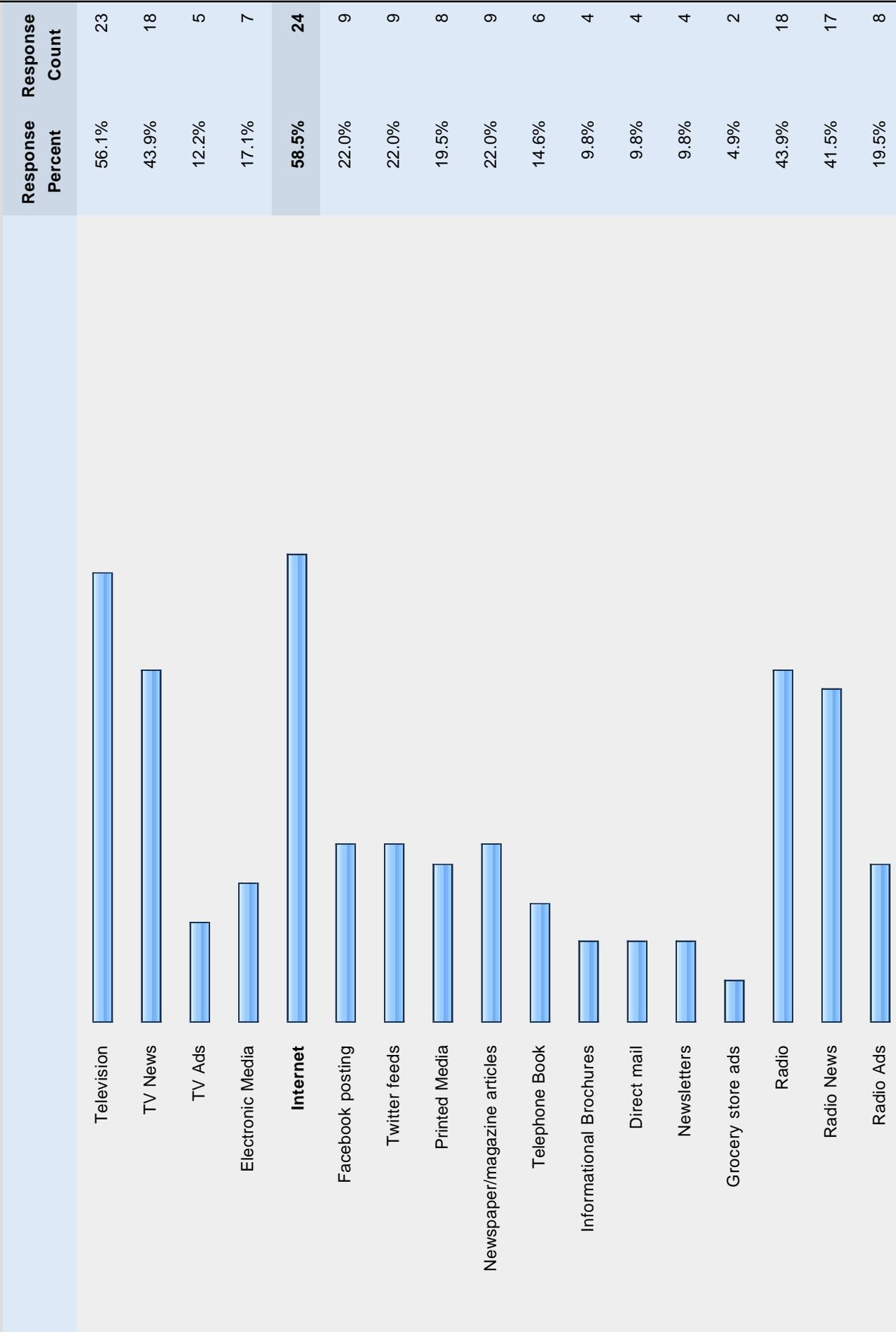
**7. Which of the following have provided you with useful information to help you be prepared?
(Check all that apply)**

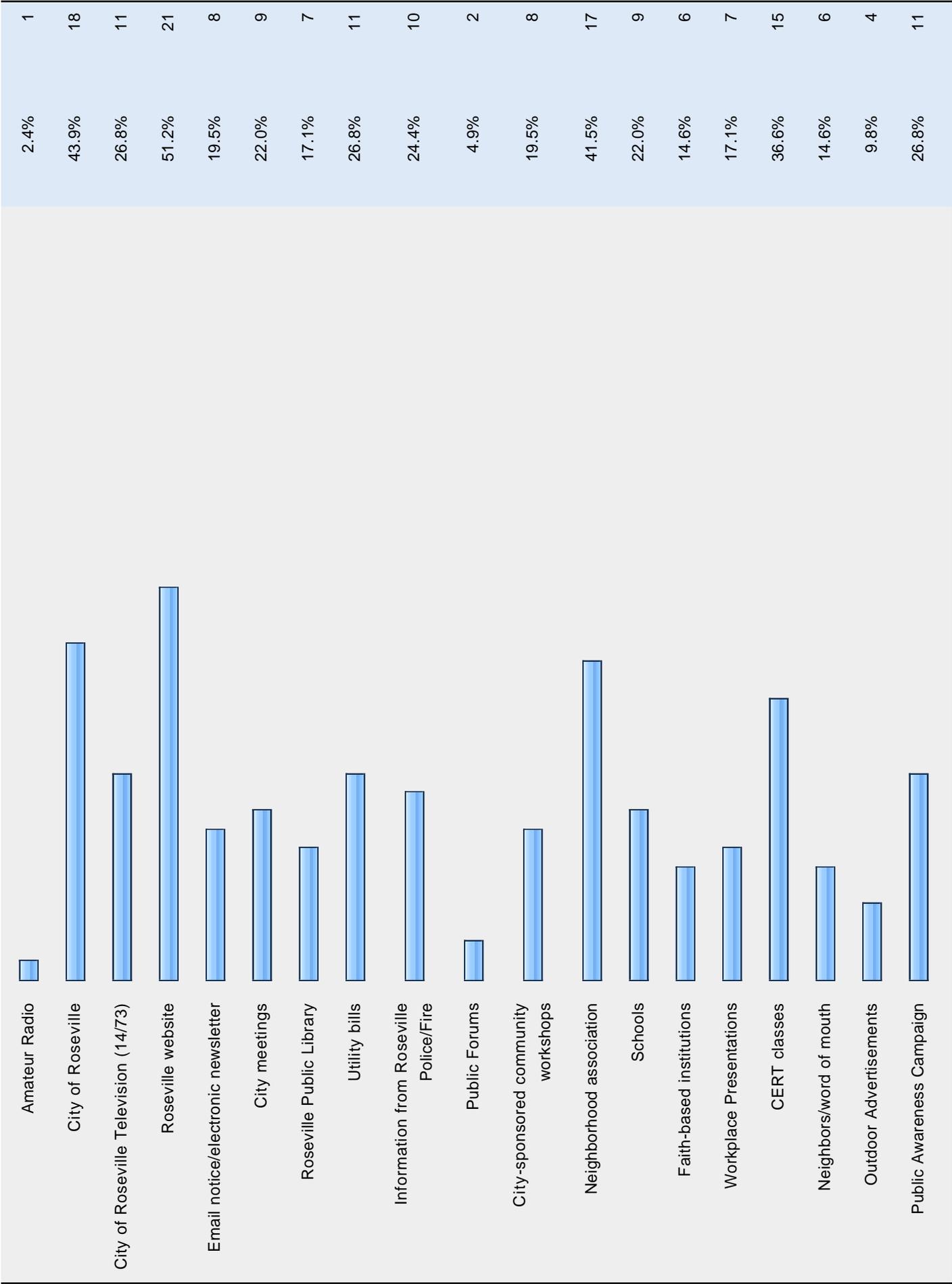


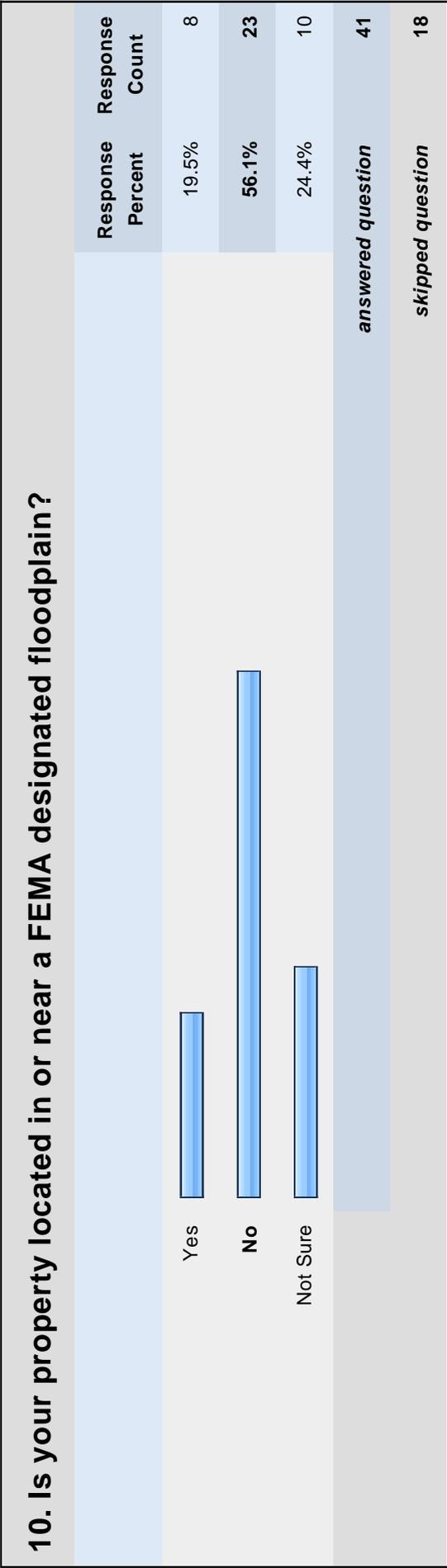
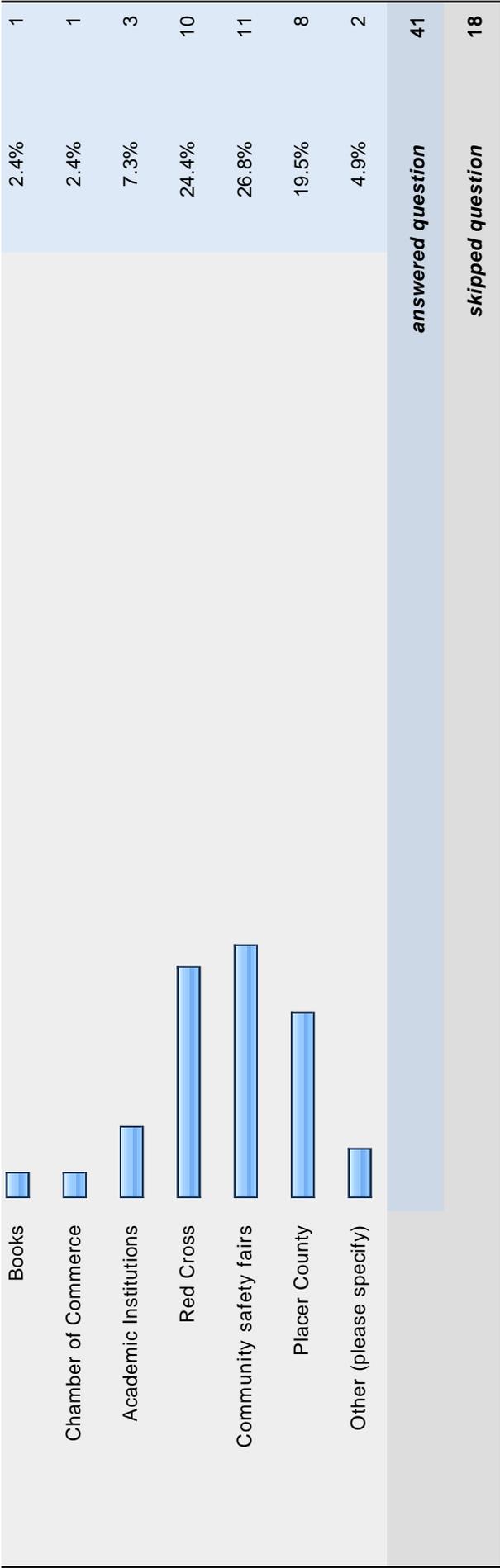
**8. Which of the following steps has your household taken to prepare for a natural hazard event?
(Check all that apply)**



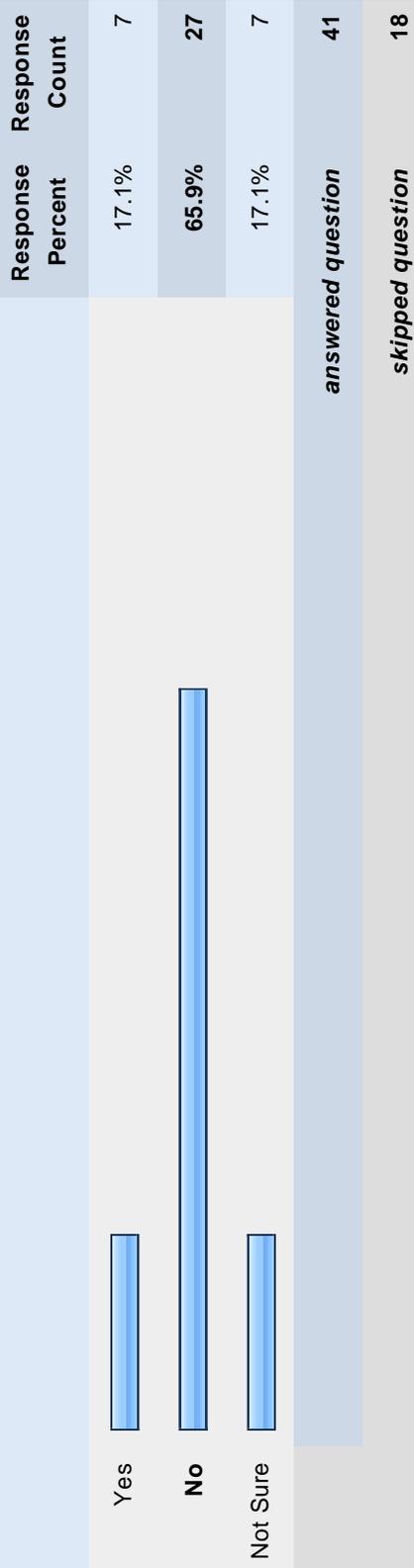
9. Which of the following methods do you think are most effective for providing information on emergency management? (Check all that apply)



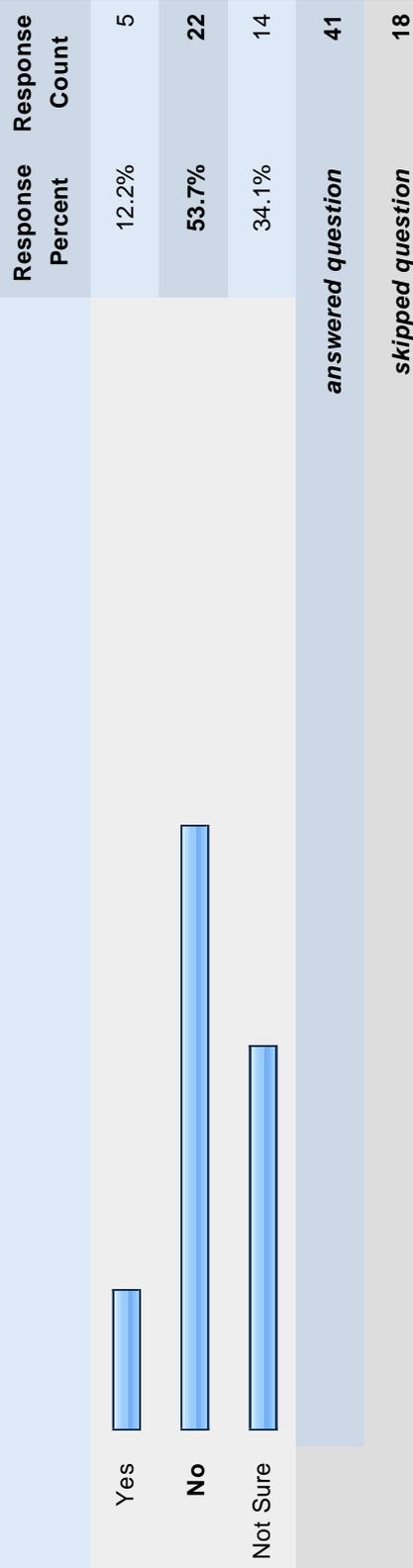




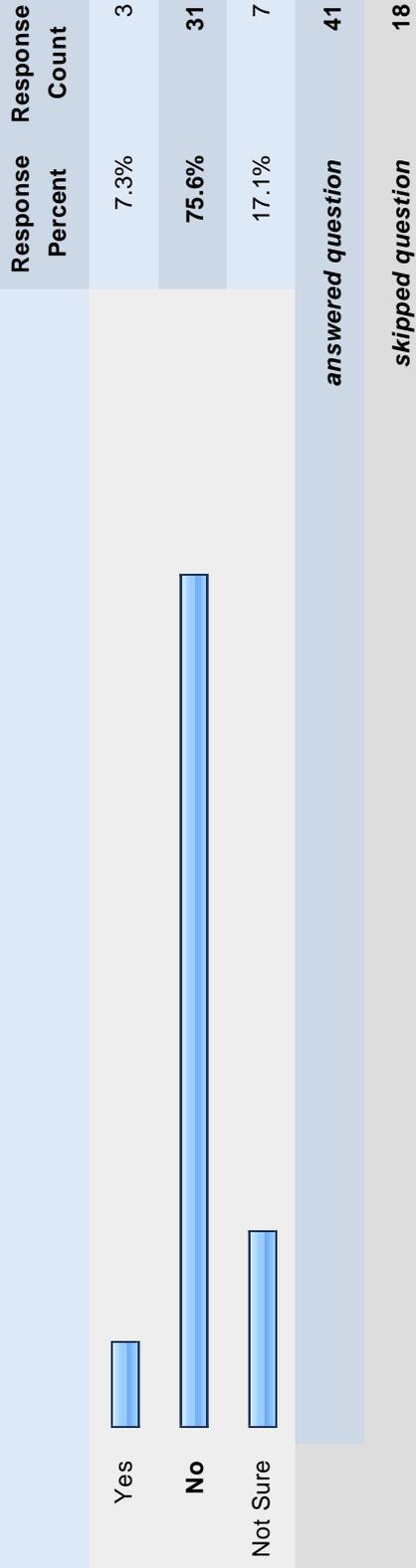
11. Do you have flood insurance?



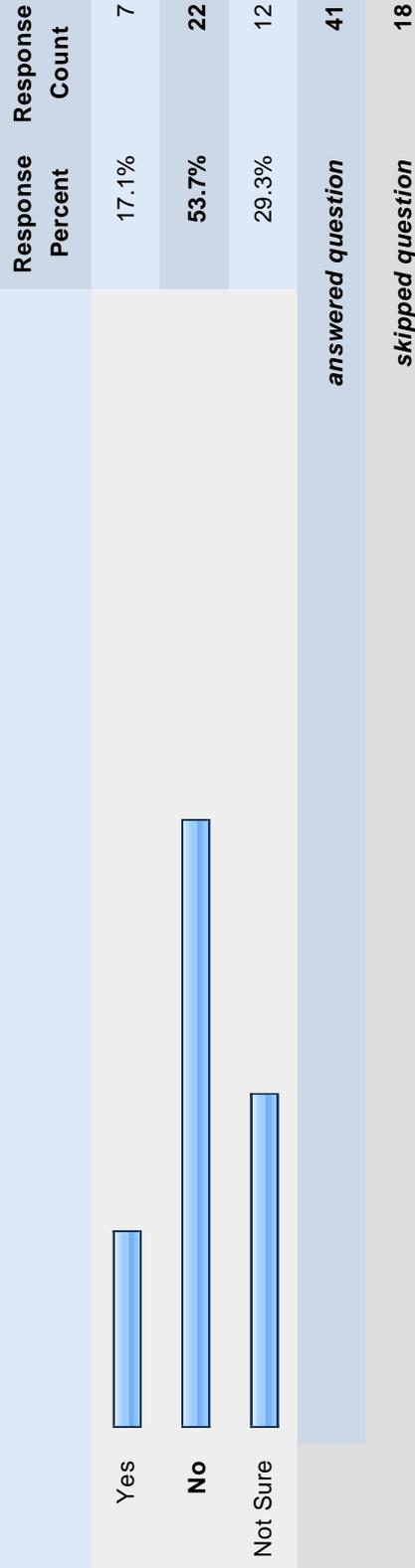
12. Is your property located near an earthquake fault?



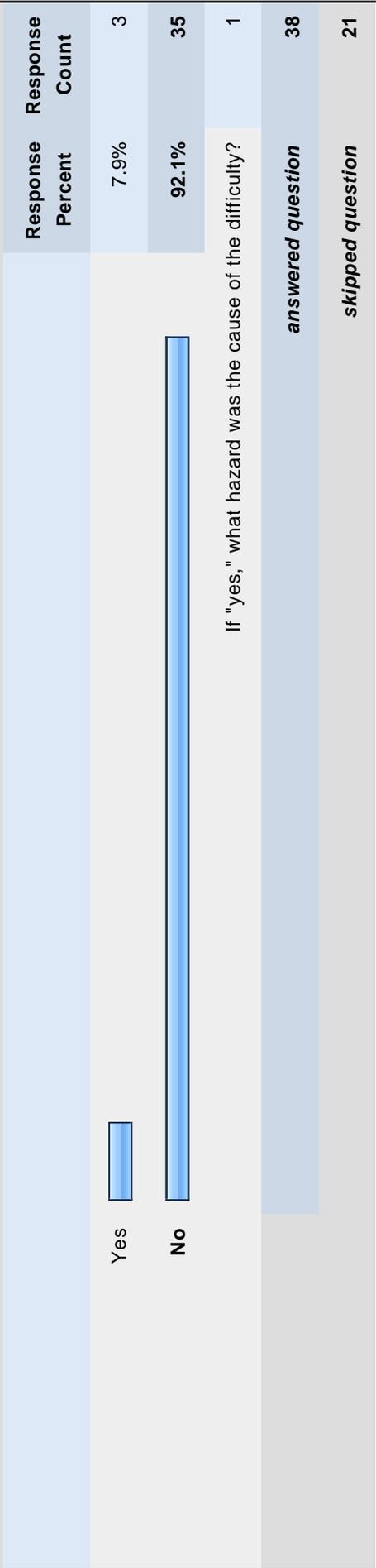
13. Do you have earthquake insurance?



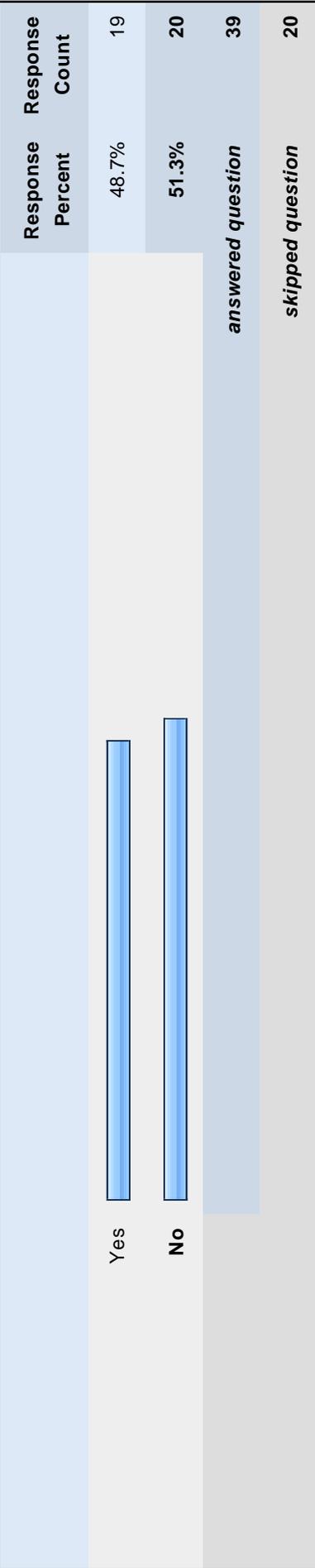
14. Is your property located in an area at risk for wildfires?



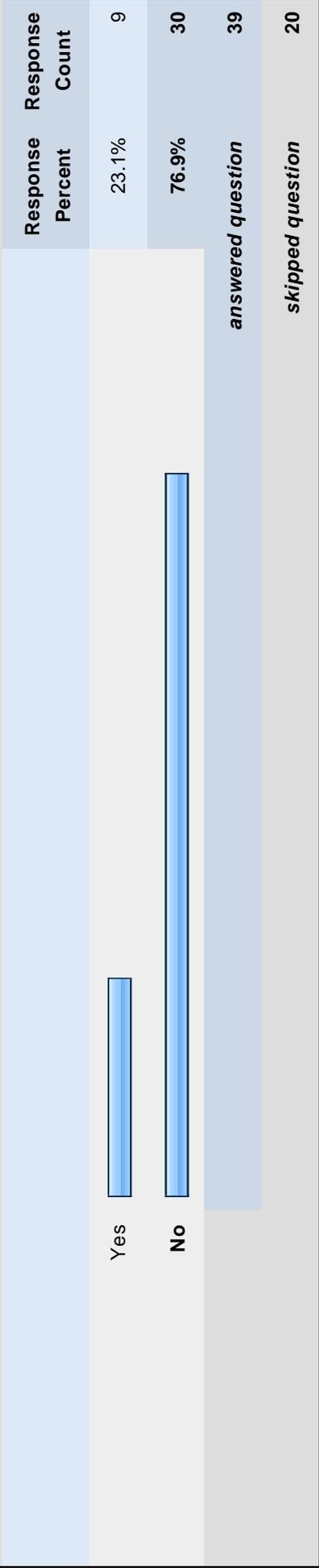
15. Have you ever had problems securing homeowners or renters insurance due to risks from hazards?



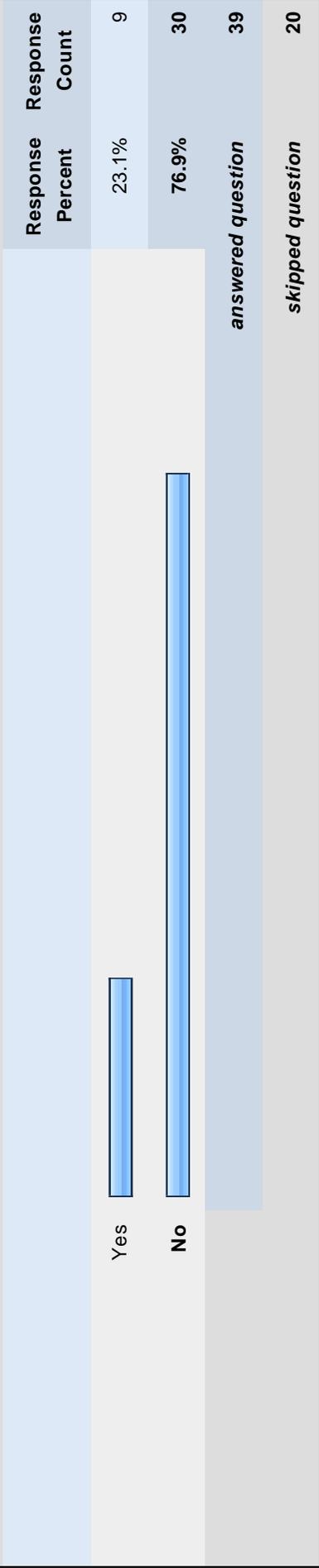
16. When you moved into your home, did you consider the impact a natural or manmade disaster could have on your home?



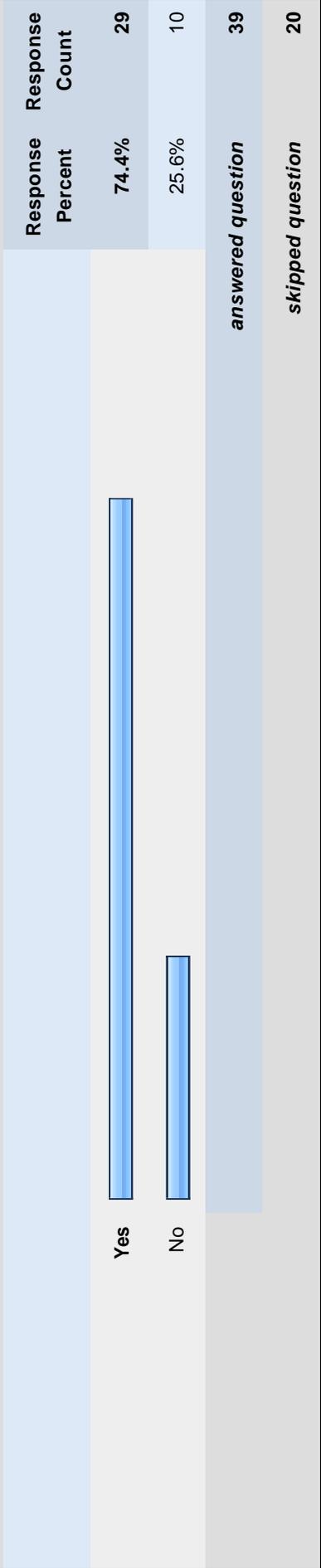
17. Was the presence of a natural hazard risk zone (e.g., dam failure zone, flood zone, landslide hazard area, high fire risk area) disclosed to you by a real estate agent, seller, or landlord before you purchased or moved into your home?



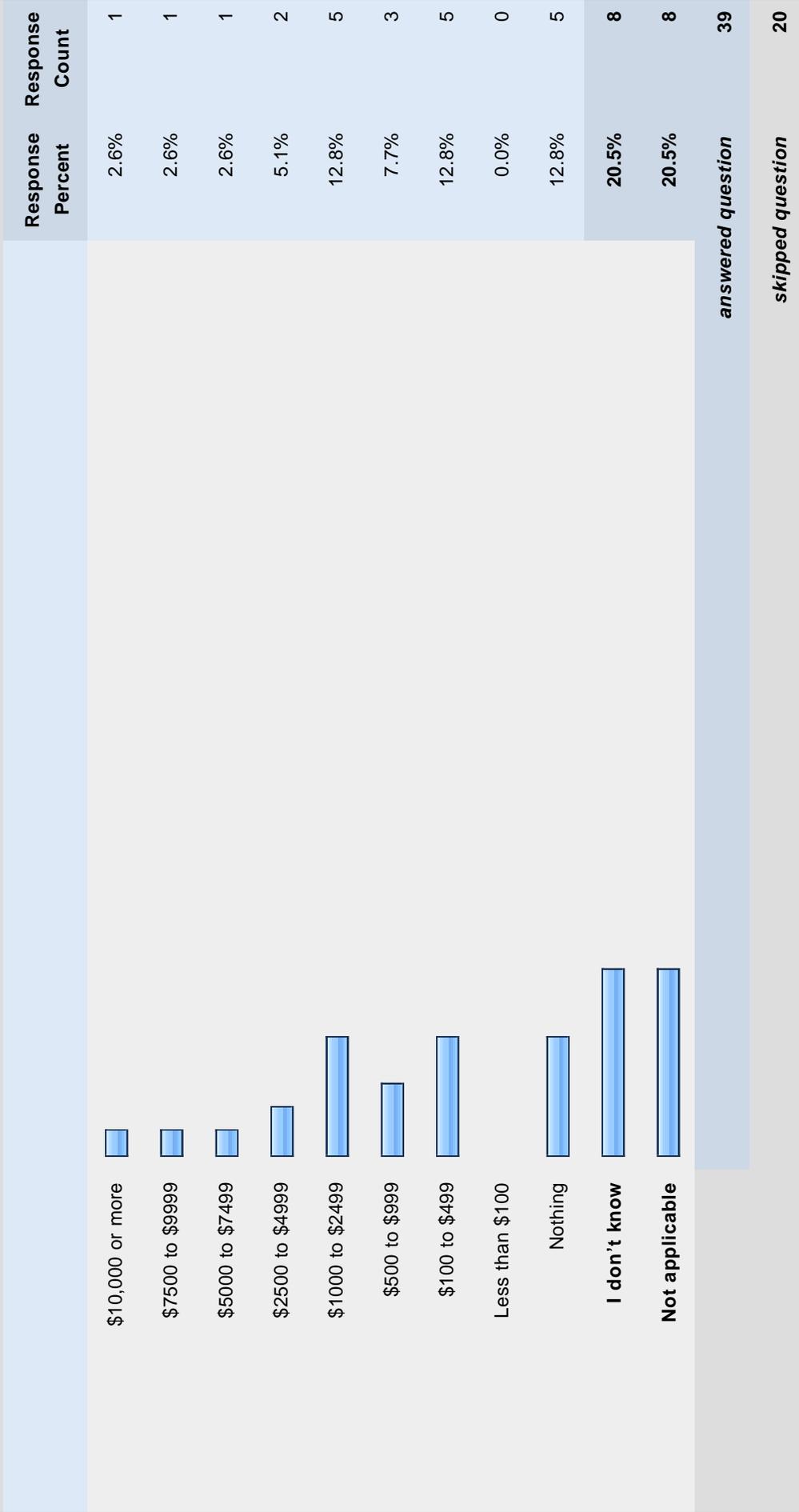
18. Was the presence of a manmade hazard risk zone (e.g., proximity to rail yard or tracks, freeway, power lines or hazardous materials) disclosed to you by a real estate agent, seller or landlord before you purchased or moved into your home?



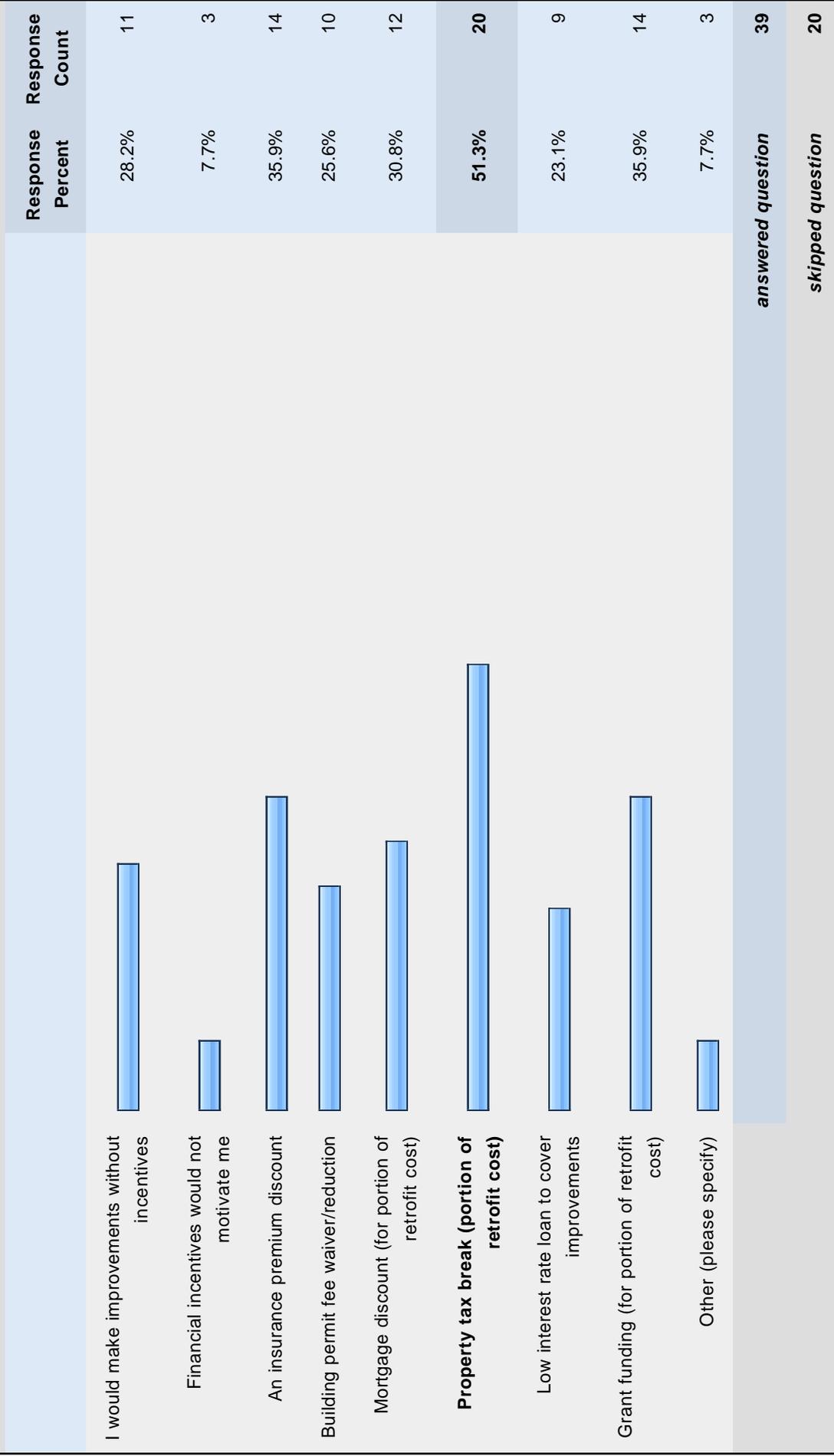
19. Would the disclosure of this type of information influence your decision to purchase or move into a home?



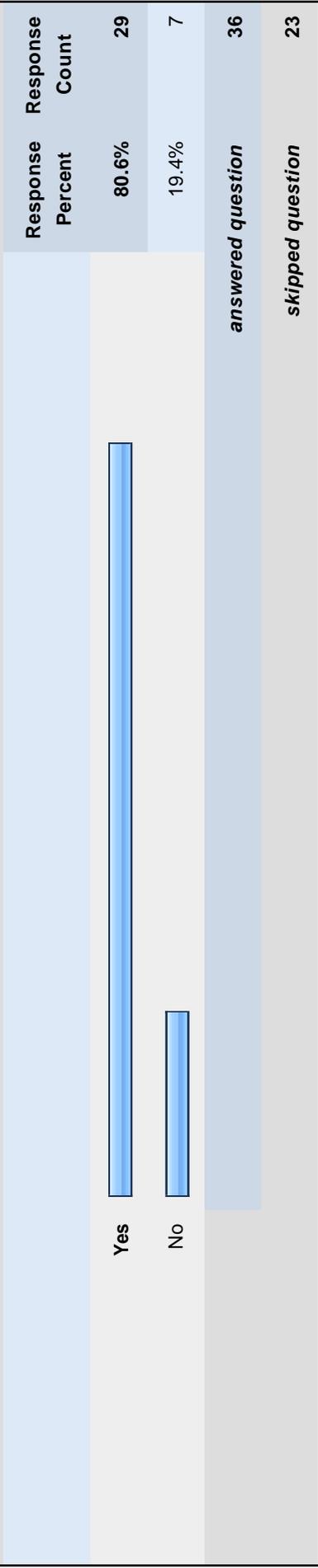
20. In the next 24 months, what is the maximum you might be willing to spend – in addition to any incentives – to make hazard mitigation improvements on your home?



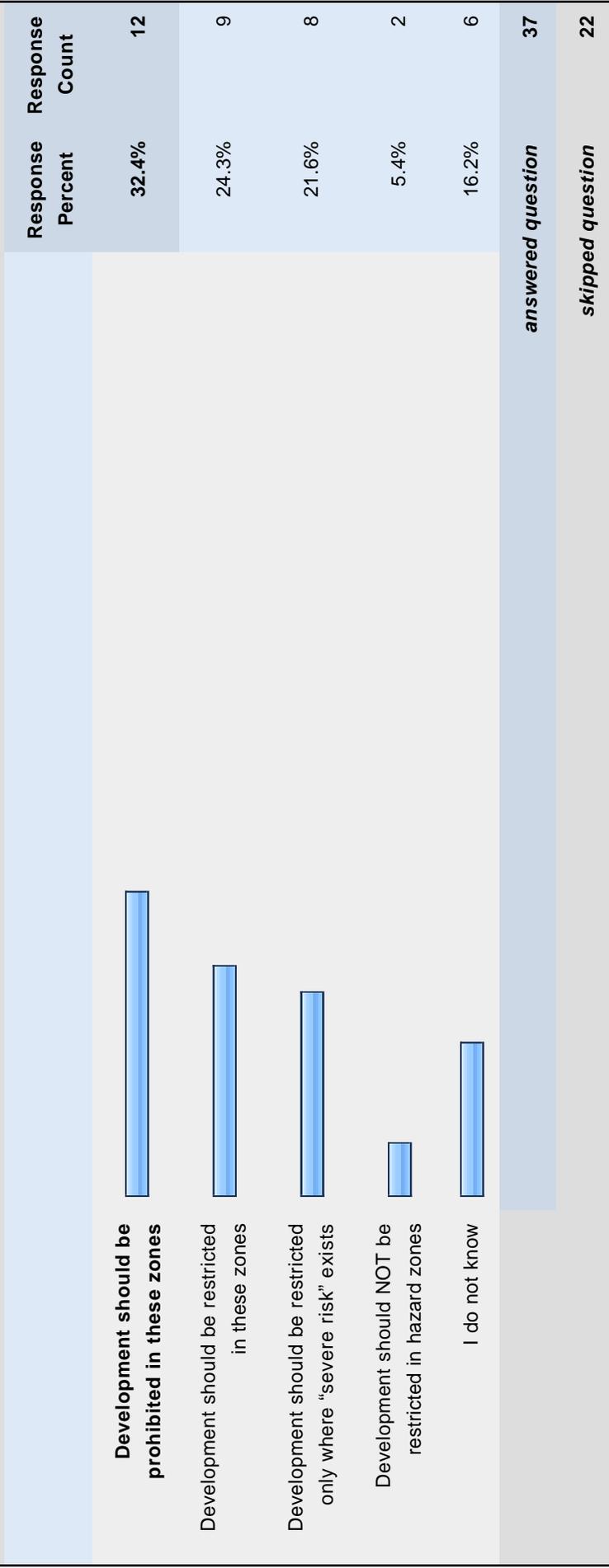
21. Which one of the following incentives would most likely motivate you to make hazard mitigation improvements on you home? (Check one)



22. If your property were located in a designated “high hazard” area, or had received repetitive damages from a natural hazard event, would you consider a “buyout” offered by a public agency?



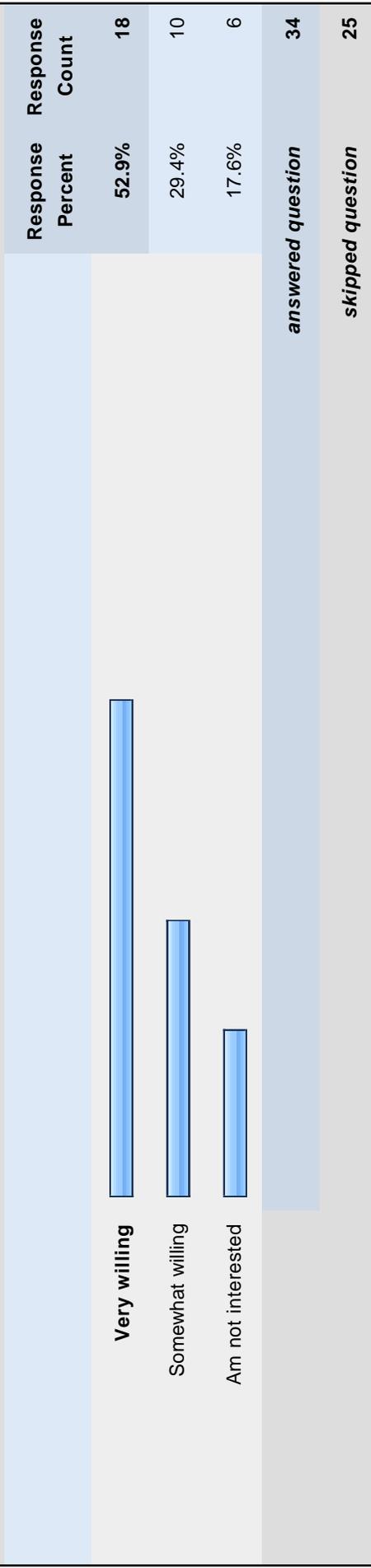
23. Do you support policies to restrict or prohibit development in designated hazard zones?



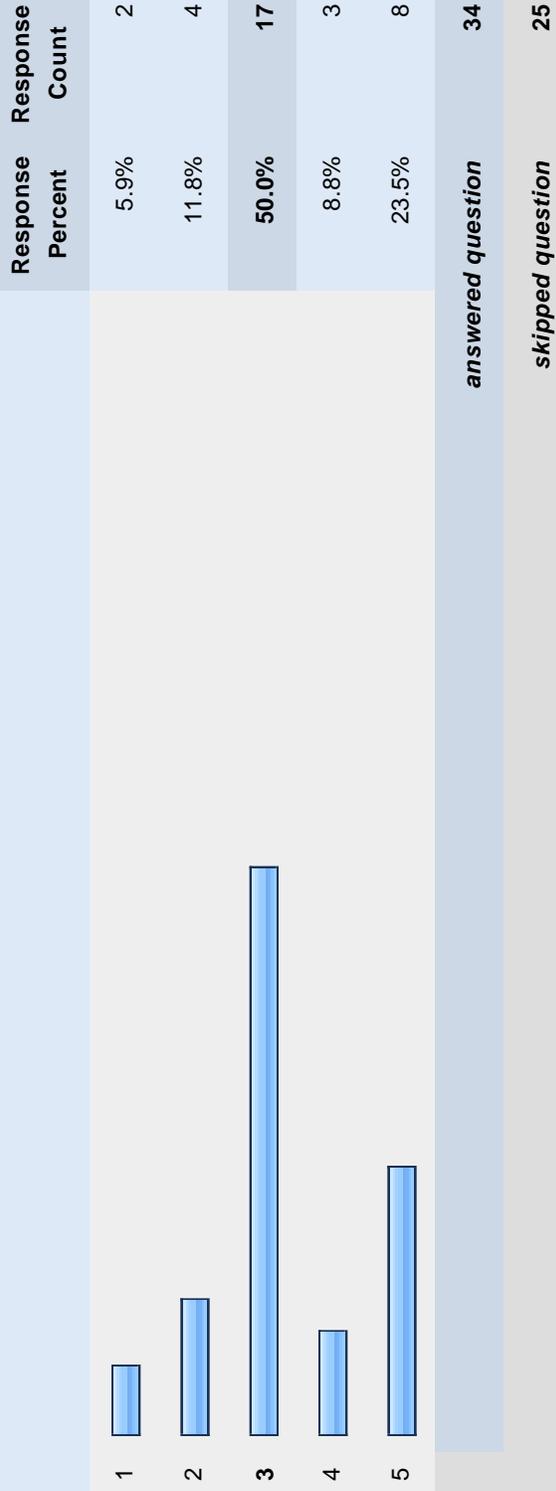
24. Please indicate how you feel about the following statement: It is the responsibility of the individual to seek education and programs that will reduce exposure to the risks associated with natural and manmade hazards.

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree	Rating Average	Response Count
Choose one:	11.1% (4)	2.8% (1)	19.4% (7)	33.3% (12)	33.3% (12)	3.75	36
<i>answered question</i>							36
<i>skipped question</i>							23

25. How willing would you be to volunteer during a disaster event?



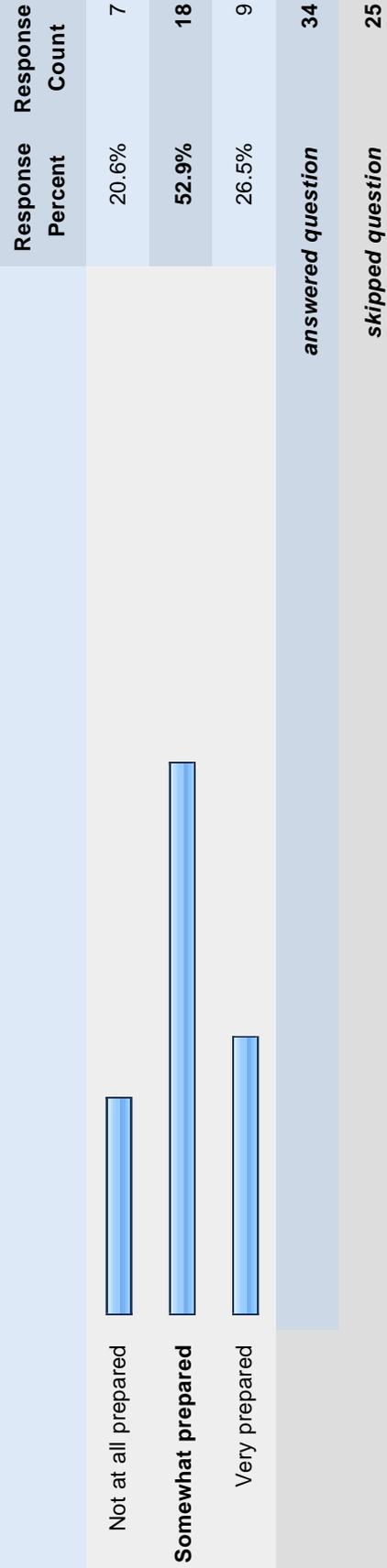
26. How many days would your household's typical supply of food and water last?



answered question 34

skipped question 25

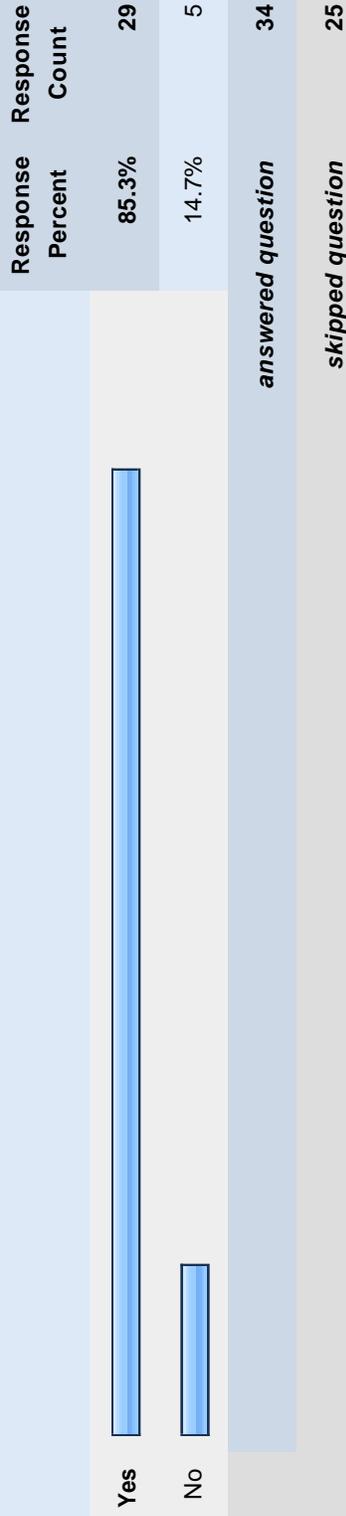
27. How prepared are you to get along without electricity and natural gas for one to five days?



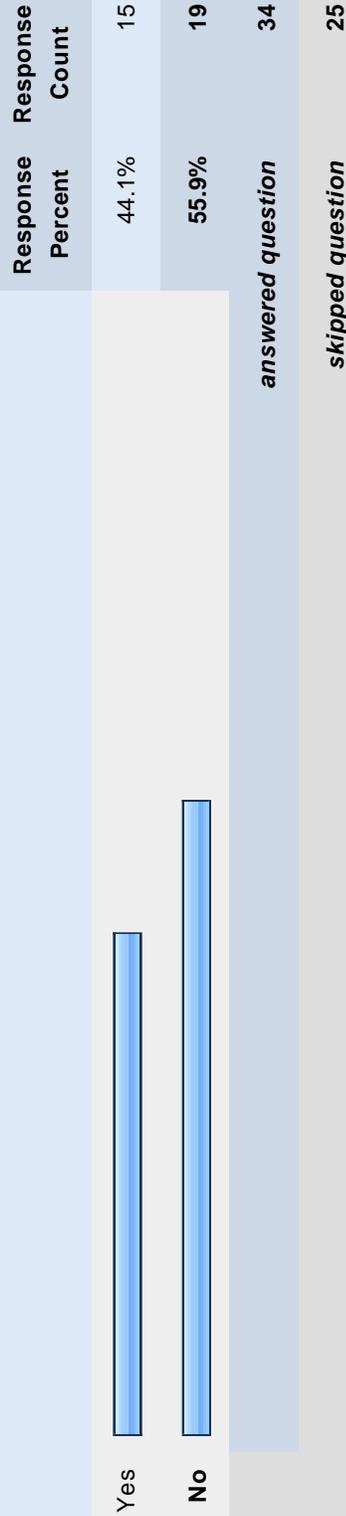
answered question 34

skipped question 25

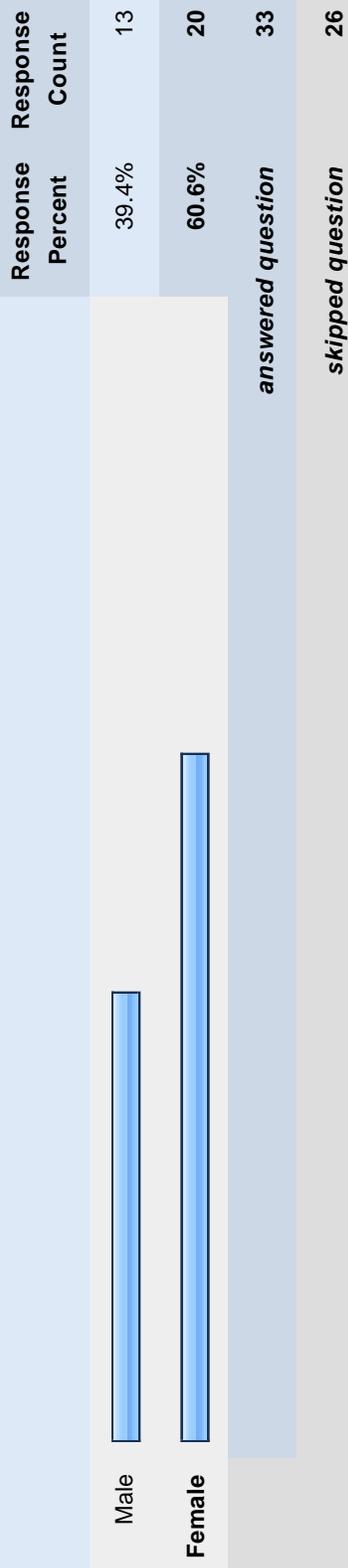
28. Are you capable of helping others evacuate from your neighborhood if needed?



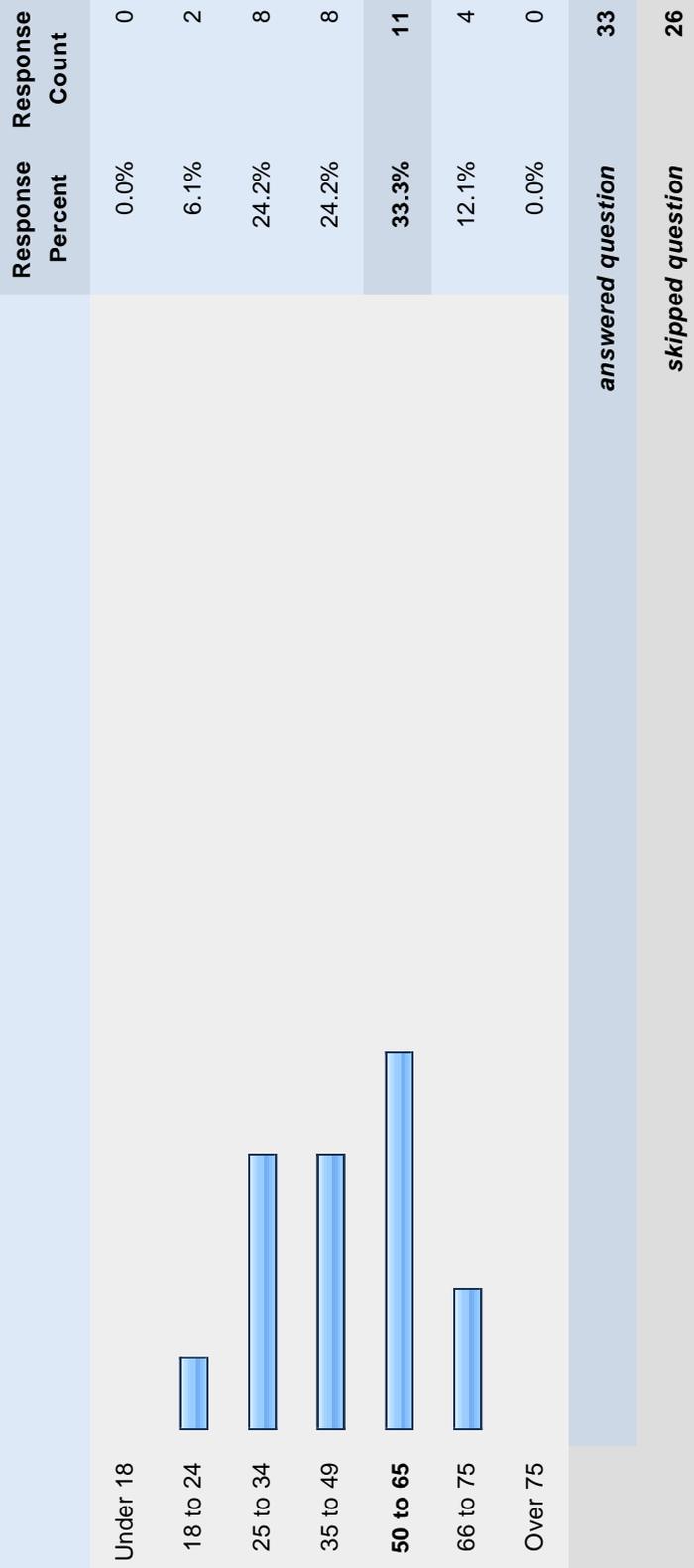
29. Would you like to be contacted by the Roseville Fire Department about emergency preparedness volunteer opportunities?



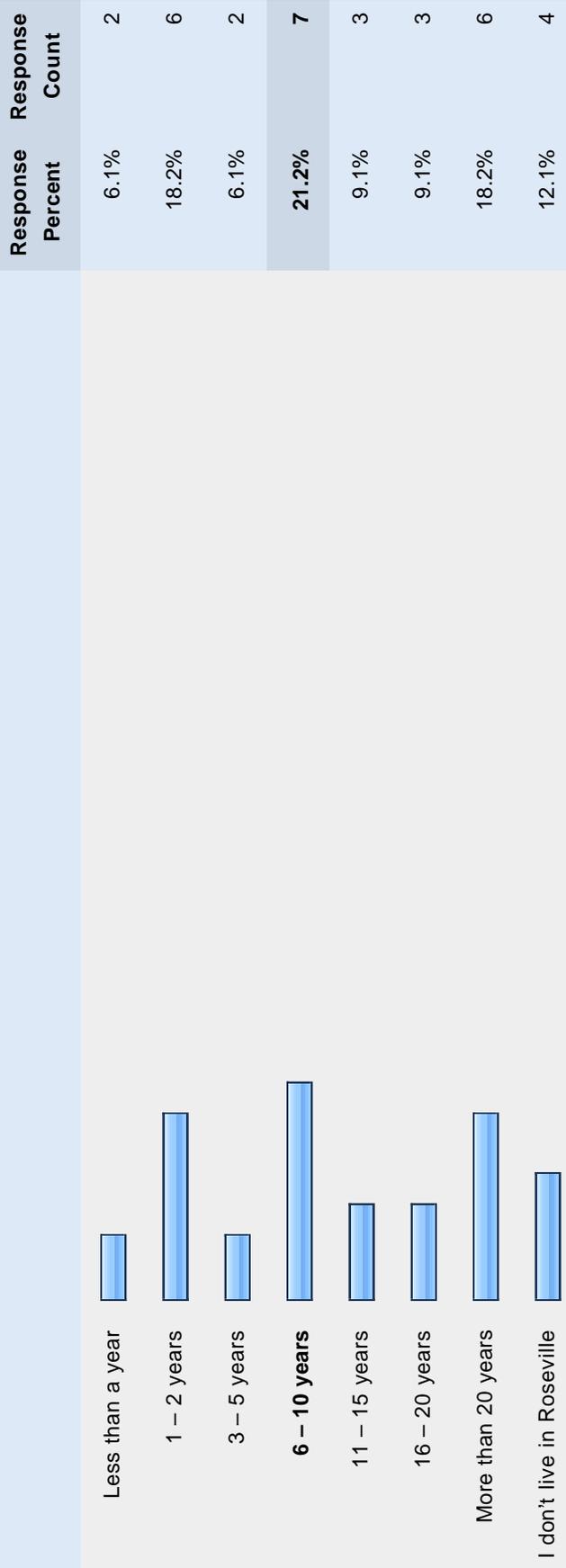
30. Please indicate your gender:



31. Please indicate your age range:



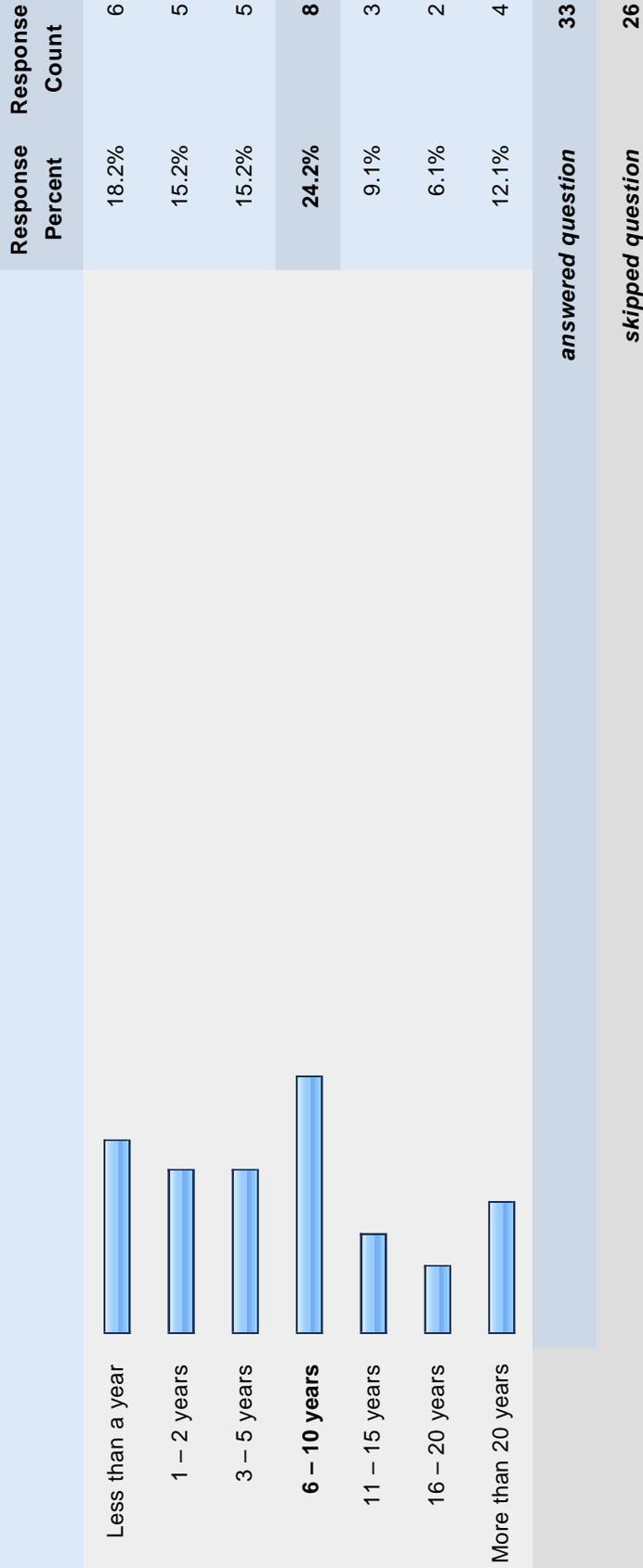
32. How long have you lived in Roseville?



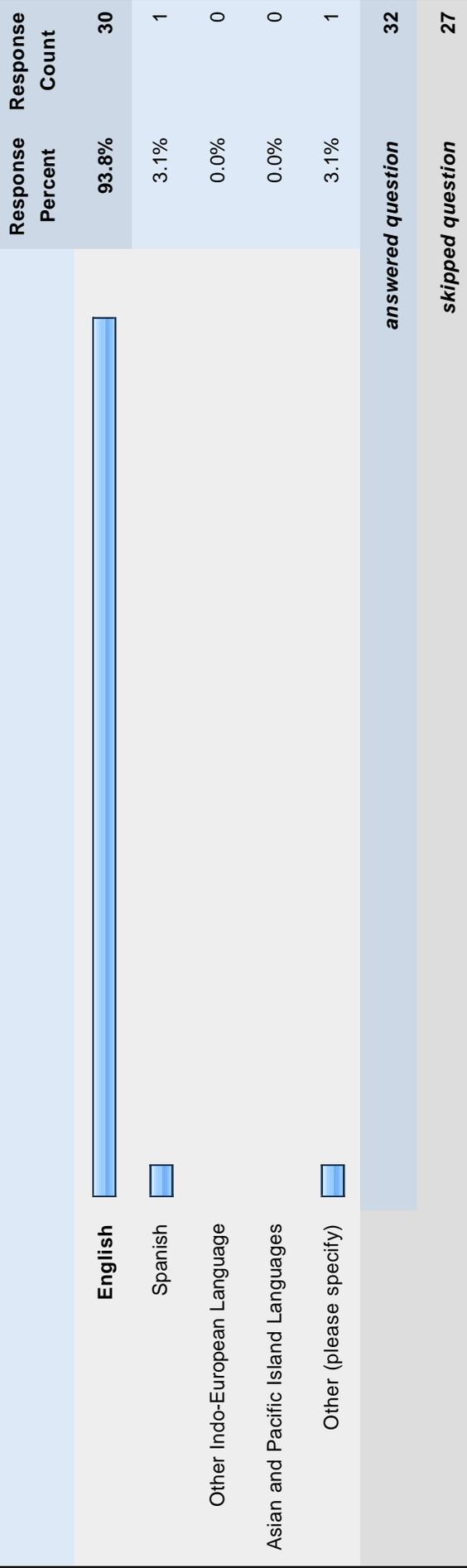
answered question 33

skipped question 26

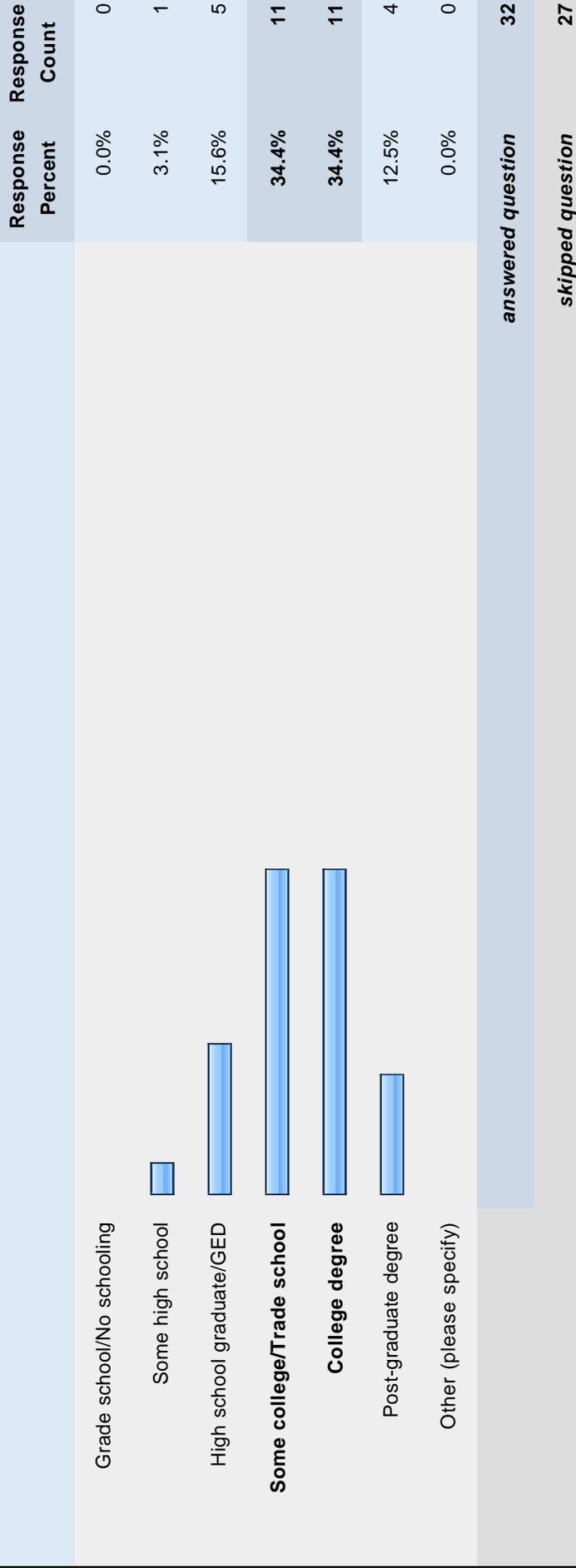
33. How long have you lived at your current residence?



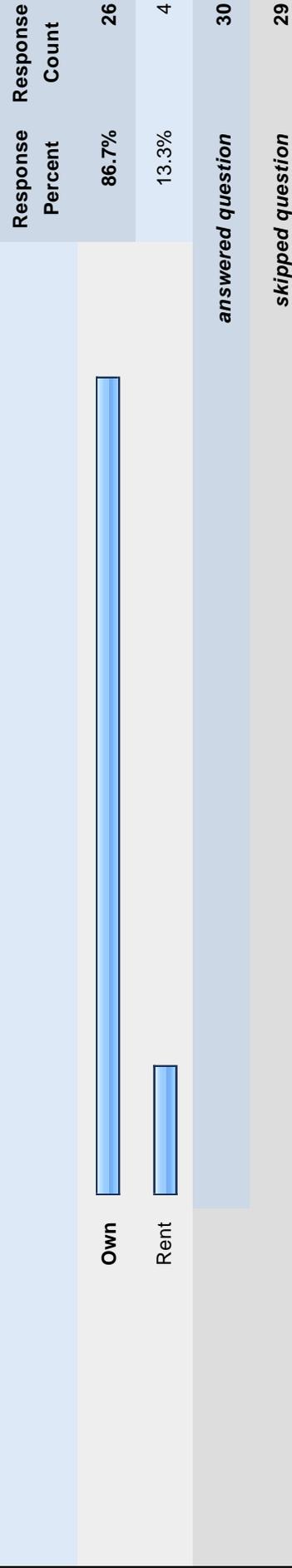
34. Please indicate the primary language spoken in your household.



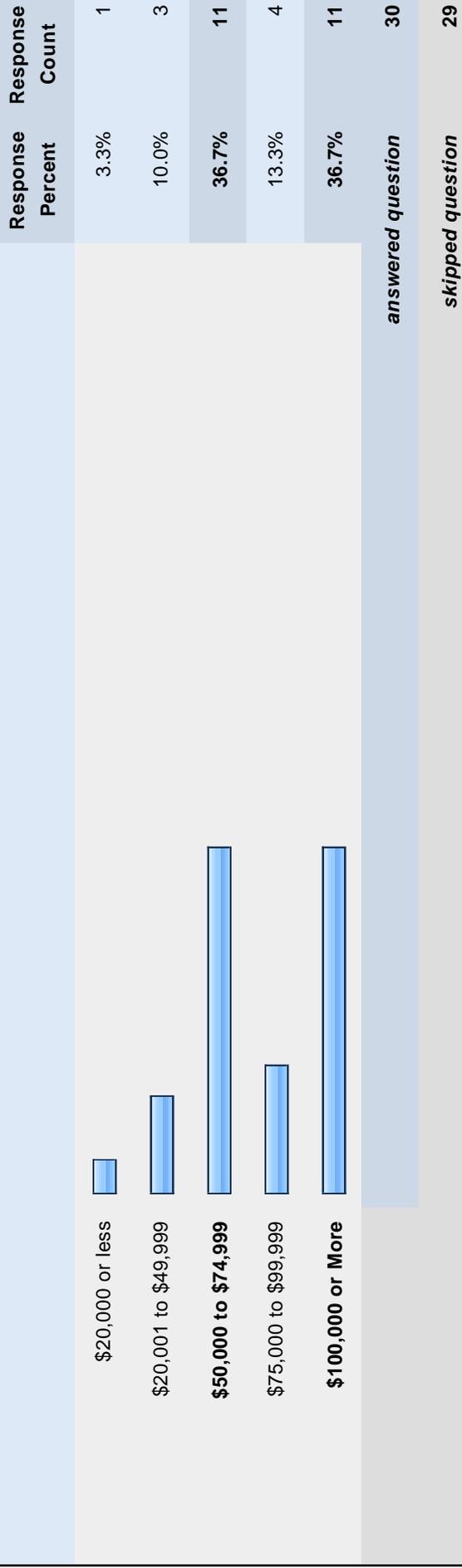
35. Please indicate your highest level of education.



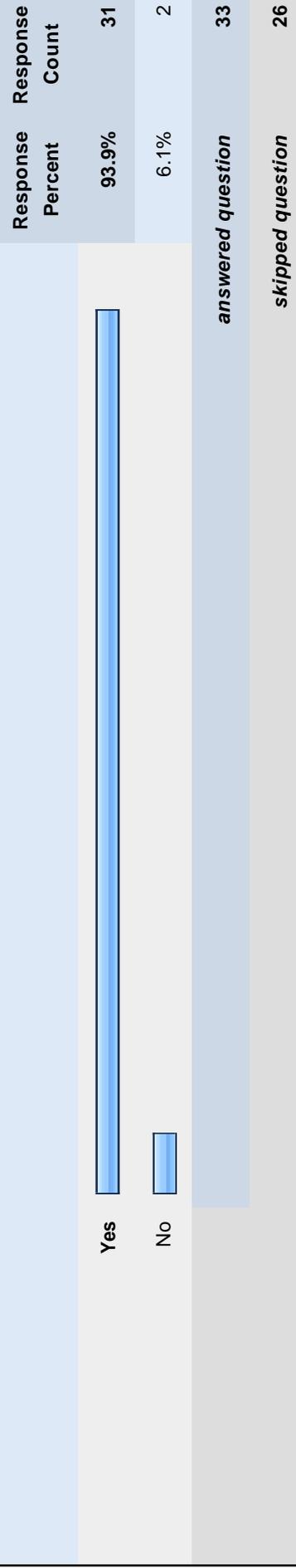
36. Do you own or rent your place of residence?



37. How much is your gross household income?



38. Do you have regular access to the Internet?



39. Comments

Response Count
3
<i>answered question</i> 3
<i>skipped question</i> 56

City of Roseville
2011 Multi-Hazard Mitigation Plan

APPENDIX C.
PUBLIC MEETINGS DOCUMENTATION

December 2010

**APPENDIX C.
PUBLIC MEETINGS DOCUMENTATION**

TO BE COMPLETED

City of Roseville
2011 Multi-Hazard Mitigation Plan

APPENDIX D.
PROGRESS REPORTS ON INITIAL HAZARD MITIGATION PLAN

December 2010

Progress Report Recommendations for Changes or Enhancement

Reporting Period:

July 2005 through July 2006

Based on the review of this report by the RMHMP Steering Committee, the following recommendations will be noted for future updates or revisions to the plan.

- In response to other Federal and State mandates such as the National Incident Management System (NIMS) and the National Emergency Management Information System (NEMIS) that are associated with the national response plan, the City may consider adding response and preparedness components to the Hazard Mitigation Plan.
- Consider linking the update of the Hazard Mitigation plan to a proposed update to the safety element of the General Plan if feasible.
- Consider adding an initiative to the Human Caused Hazards matrix that promotes incentives for privately owned “critical facilities” to prepare a site specific vulnerability assessment of their facility and confidentially sharing that information with City Emergency Managers and First responders.
- Create a process that develops a dynamic public information strategy that will meet the constantly changing needs of the City and its stakeholders in all phases of emergency management.
- Enhance the City’s ability to receive and respond to citizen inquiries related to drainage issues within the City.

Reporting Period:

July 2006 through July 2007

Based on the review of this report by the RMHMP Steering Committee, the following recommendations will be noted for future updates or revisions to the plan.

- The City will change the risk assessment contained within the Plan if and when the Creekview and Sierra Vista Specific Plans are annexed to the City.
 - The City will consider enhancing the CERT program by marketing the availability of Sacramento Metro Fire classes to Roseville residents and looking at future staff resources to coordinate the program.
 - Under plan update, the City will consider a multi-hazard initiative that deals with adopting regulations that promote protection of all buildings within the City such as the Cities recently adopted Fire Protection Ordinances.
 - Building on the success of Builder incentives established by the city for its new fire protection ordinances, future plan updates or enhancement may want to consider providing builder incentives under other regulations for pro-active mitigation/prevention employed during new development within the City.
 - Future plan updates or enhancements should address the issue of emergency services coordination within the city.
-

Reporting Period:

July 2007 through July 2008

Based on the review of this report by the RMHMP Steering Committee, the following recommendations will be noted for future updates or revisions to the plan.

2008 Amendment recommended by the Multi-Hazard Mitigation Committee on July 15, 2008:

- Identify funding sources for Action Plans other than the grant programs administered by FEMA.
- Seek opportunities for Category A Public Assistance funding to reimburse the Fire Department budget for overtime costs associated with mutual aid requests to out-of-town wildfires and possibly the fit test requirements for N95 masks.
- Ensure that the MHMP addresses new state legislation adopted since the 2005 original plan.
- Address the new State mandated floodplain management requirements adopted by the State of California.
- Enhance the public education and outreach measures in the MHMP to be more specific and to cover more topics.
- Apply for public education and outreach grant funding through FEMA for such programs as weed abatement awareness, a defensible space campaign (similar to LA County's program), preparing a 72-hour post-disaster emergency kit, and an outreach campaign including RCONA to assist neighborhoods in the event of a disaster. Suggestions for the RCONA-City partnership include having workshops with a different mitigation topic each month and presentations to school groups about preparedness.
- Prepare a Post-Disaster Action Plan which assigns recovery responsibilities in the event a disaster occurs.
- Continue to improve the safety of the City's critical facilities. For example, the Police Department and Building Maintenance Division will install a manual shut off for the Police Department's HVAC system. During a hazard analysis of the building, staff determined that if a hazardous spill occurred at the railroad, on a local roadway or adjacent business, the Police Department was unable to turn off the building's air circulation system. The \$12,000 manual shut off project will be complete in August 2008.
- Complete a seismic survey of city-owned facilities and include the findings of the report (vulnerabilities and future capital projects) in the MHMP 2010 update.
- Address climate change either by making climate change a separate (eighth) hazard in the MHMP or by adding climate change impacts to each of the seven hazards already included in the Plan. Staff is also required to address climate change in any planning efforts going forward per State mandates. The City has incorporated climate change into the Roseville General Plan in order to be in compliance with the California Environmental Quality Act (CEQA) guidelines and will work to incorporate climate change into all hazard mitigation planning efforts going forward.
- Attempt to sequence future updates to the MHMP with current and future updates to the General plan



**City of Roseville, CA
Multi-Hazard Mitigation Plan
2009 Progress Report**

Reporting Period:

July 2008 through Oct 2009

Background: Following a tradition of progressive and innovative planning, the City of Roseville City Council approved the Roseville Multi-Hazard Mitigation Plan (RMHMP) in 2005. The RMHMP details the City's vision for reducing risk from all hazards by identifying resources, information, and strategies for risk reduction. Responding to programmatic requirements defined under the Disaster Mitigation Act of 2000, the City embarked on a 12 month planning process that was scripted to provide as many tangible benefits for the City from this single planning effort. Primarily, these benefits are associated with grant funding eligibility and meeting all requirements to achieve the nation's very first Class 1 rating under FEMA's Community Rating System (CRS). The plan was adopted by the City Council on July 20, 2005, and approved by FEMA Region IX for compliance with Section 201.6, Chapter 44 of the Code of Federal Regulations (44CFR) on August 9, 2005. By completing this process, the City has achieved compliance with the parameters of the Disaster Mitigation Act and leveraged hazard mitigation grant funding opportunities afforded under the Robert T. Stafford Act. Copies of the plan are available to the public through the City of Roseville Public Library and the Plan is available online at:

http://www.roseville.ca.us/fire/emergency_preparedness/multi_hazard_mitigation_plan.asp

Purpose: The purpose of this report is to provide the Roseville City Council, stakeholders and the citizens an annual update on the implementation of the action plan identified in the Roseville Multi-Hazard Mitigation Plan. This report has been prepared by the planning team and was reviewed and confirmed by the RMHMP Steering Committee in accordance with Part 5, Chapter 19.4 of the Plan. The RMHMP Steering Committee reviewed and approved this progress report at their annual meeting held July 15, 2008. The objective of this annual evaluation is to ensure that there is a continuous planning process that will keep the RMHMP dynamic and responsive to the needs and capabilities of the stakeholders. This report will discuss the following:

- I.) **Natural Hazard Events that have occurred within the last year**
- II.) **Changes in risk exposure within the planning area**
- III.) **Mitigation Success Stories**
- IV.) **Review of the action plan(s)**
- V.) **Changes in capability within the planning Area that could impact plan implementation**
- VI.) **Recommendations for changes/enhancement**

The RMHMP Steering Committee: The development of the plan was overseen by a 13-member steering committee appointed by the Roseville City Council and comprised of planning partners and stakeholders within the planning area. This oversight committee operated under a set of ground rules that they helped to establish and that supported the primary objectives of the planning process. During the plan's development process, the Steering Committee agreed that they would remain as a viable body to oversee the maintenance aspects of the plan as established in Chapter 19. The Steering Committee continues as organized in the established ground rules, and is dynamic in its membership. There will be turnover in this membership annually that will be monitored via the progress reporting mechanism. It is also anticipated the Steering Committees role in overall plan implementation will evolve, based on the hazard mitigation needs of the city. At a minimum, the Steering Committee will provide technical review and oversight on the development of the annual progress report. For this reporting period, the Steering Committee Membership is as indicated in table PR-1.

TABLE PR-1 2009 STEERING COMMITTEE MEMBERS			
Name	Title	Jurisdiction or Agency	Representing
Grace Keller, Chair	Member	Community Emergency Response Team (CERT)	Stakeholder
Clair Alway	Homeowner	Floodplain resident	Citizen
Mike Escobedo	Member	City Hope	Stakeholder
Russ Palchak	Assistant Administrator for Operations Planning	Kaiser Permanente	Stakeholder
Rita Brohman	Fire Dept volunteer, faith-based orgs, Roseville Transportation Commissioner	City of Roseville Fire Department	Stakeholder
Jerry Erickson	Member	Roseville Coalition of Neighborhood Associations (RCONA)	Citizen
Ben Salo	Manager, Hazardous Materials	Union Pacific Railroad	Stakeholder
Dean Grundy	Battalion Chief	City of Roseville Fire Department	City
Mike Isom	Planner	City of Roseville Planning Department	City
Barbara Todd	Emergency Management Coordinator/Pre-Hospital Care Coordinator	Sutter Roseville Medical Center	Stakeholder

TABLE PR-1
2009 STEERING COMMITTEE MEMBERS

Name	Title	Jurisdiction or Agency	Representing
George Booth	Assoc. Civil Engineer	Sacramento Department of Water Resources and Roseville city resident	Citizen/Stakeholder
Jim Williams	Member	RCONA	Citizen
Chris Wooden	Safety Manager	SureWest	Stakeholder

I.) Natural Hazard Events within the Planning Area

During the reporting period, there were four notable natural hazard events that had a measurable impact on people or property within Roseville.

Wind Storm.

On Tuesday, October 13th, 2009 the City of Roseville was hit by a severe storm with wind gust up to 55 mph and 1.3” of precipitation. The eye of the storm reached Roseville at around 4:00 PM in the afternoon. Parks & Recreation crews performed emergency response work into the late evening hours to assure public safety. The crews responded to emergency calls, which included: clearing streets and intersections, removing trees that were threatening or damaging homes, clearing sidewalks, and assisted the Fire and Police Departments. In the following three days the crews responded to a total of 100 locations to assure and restore public safety. As of November 6th crews from the City’s Open Space Division have spent over 600 hours for emergency response and storm cleanup work. The storm cleanup work is still continuing.

Statewide Drought – Year 3.

On February 27, 2009, in recognition of California's third consecutive year of drought, Governor Arnold Schwarzenegger proclaimed a state of emergency and ordered immediate action.

The Governor’s press release dated February 27th stated: "even with the recent rainfall, California faces its third consecutive year of drought and we must prepare for the worst - a fourth, fifth or even sixth year of drought," Governor Schwarzenegger said. "Last year we experienced the driest spring and summer on record and storage in the state's reservoir system is near historic lows. This drought is having a devastating impact on our people, our communities, our economy and our environment - making today's action absolutely necessary. This is a crisis, just as severe as an earthquake or raging wildfire, and we must treat it with the same urgency by upgrading California's water infrastructure to ensure a clean and reliable water supply for our growing state."

The Governor's order directs various state departments to engage in activity to provide assistance to people and communities impacted by the drought. The proclamation:

- Requests that all urban water users immediately increase their water conservation activities in an effort to reduce their individual water use by 20 percent

- Directs the Department of Water Resources (DWR) to expedite water transfers and related efforts by water users and suppliers
- Directs DWR to offer technical assistance to agricultural water suppliers and agricultural water users, including information on managing water supplies to minimize economic impacts and implementing efficient water management practices
- Directs DWR to implement short-term efforts to protect water quality or water supply, such as the installation of temporary barriers in the Delta or temporary water supply connections
- Directs the Labor and Workforce Development Agency to assist the labor market, including job training and financial assistance
- Directs DWR to join with other appropriate agencies to launch a statewide water conservation campaign calling for all Californians to immediately decrease their water use
- Directs state agencies to immediately implement a water use reduction plan and take immediate water conservation actions and requests that federal and local agencies also implement water use reduction plans for facilities within their control

In particular, the order directs that by March 30, 2009, DWR shall provide an updated report on the state's drought conditions and water availability. According to the proclamation, if the emergency conditions have not been sufficiently mitigated, the Governor will consider additional steps. These could include the institution of mandatory water rationing and mandatory reductions in water use; reoperation of major reservoirs in the state to minimize impacts of the drought; additional regulatory relief or permit streamlining as allowed under the Emergency Services Act; and other actions necessary to prevent, remedy or mitigate the effects of the extreme drought conditions. DWR and California's Department of Food and Agriculture will also recommend, within 30 days, measures to reduce the economic impacts of the drought, including but not limited to water transfers, through-Delta emergency transfers, water conservation measures, efficient irrigation practices, and improvements to the California Irrigation Management Information System. Last week, DWR announced that California's severe drought had prevented it from increasing its State Water Project (SWP) delivery allocations for the first time since 2001. This year's allocation as of February is at just 15 percent of SWP contractor's requests. This is only the second time in SWP history that the February allocation has been this low.

Source: State of California website

Changes in Risk exposure within the Planning Area

The RMHMP addressed the probable impact for the following natural hazard events within the City of Roseville:

- Drought
- Earthquake
- Flood
- Landslides
- Human Caused Hazards
- Human Health Hazards
- Severe Weather
- Wildland Fire

During the reporting period, there was no occurrence of any natural hazard event within the planning area that would alter or change the probability of occurrence, or ranking of risk for the natural hazards addressed by the RMHMP.

III). Mitigation Success Stories

During the reporting period, the City had a number of mitigation success stories that reflect the City's commitment to multi-hazard mitigation and the philosophy that the City Council and staff are responsible for the good stewardship of our resources.

- **Native Oak Tree Planting Project: Maintenance and Monitoring continued.** . The Urban Forester continues to monitor the progress of the Native Oak Tree Planting Project that began during the winter and spring of 2007-2008, which planted 6,250 trees. As of 2009, the total percent survival for all oak tree species for all sites was exceptional with over ninety-one percent (91.3%) surviving. Maintenance and monitoring will continue through 2010.
- **Future Native Oak Tree Planting:** Currently underway is the development of another large scale planting of approximately 3000 Oak trees. Planting sites totaling 40 acres were selected within City Open Space and soil samples were taken to assure proper species selection for each site. We expect to begin planting in early spring of 2010. The trees will be maintained and monitored for five years.
- **FY07 Flood Mitigation Assistance Grant:** The City of Roseville was notified July 2, 2008 that a grant in the amount of \$227,996 was awarded for a FEMA match to purchase 1211 Champion Oaks Drive. The residence is a severe repetitive loss structure that has received FEMA funding in the past for an elevation project. The City Council approved the purchase of the property for \$300,000 on September 3, 2008 with funding for the difference between the grant amount and the purchase price already included in the City's Public Works Department budget. The structure was removed on October 23, 2008 allowing the City to reset the stream gauge in the Champion Oaks neighborhood.
- **NIMS National Incident Management System Training.** To enhance the ability of the City of Roseville to manage domestic incidents, the National Incident Management System (NIMS) was adopted by ordinance (now Roseville Municipal Code Section 9.28.075). The ordinance also established components of the Standard Emergency Management System (SEMS) as outlined in Title 19 of the California Code of Regulations. To comply with NIMS Phase 1, key city staff attended classes and received certification based on their job classification and assigned roles should an emergency occur. Plans to train all city staff in NIMS continue and are now part of required training for all new and existing city employees and elected officials. Advanced training is scheduled beginning in June 2008 to comply with NIMS Phase 2. All department heads, elected officials, and staff in positions directly responsible for the Emergency Operations Center have been trained in advanced NIMS coursework.
- **Roseville Activates Stage Two Water Conservation Alert.** On February 20, 2009, the City of Roseville's Environmental Utilities Department activated a Stage Two Water Conservation Level within the Roseville city limits in response to a letter received from the U.S. Bureau of Reclamation (USBR) which reduced Roseville's water supply for the 2009 calendar year by 50 percent.

Roseville's normal year water supply from Folsom Reservoir is 32,000 acre feet, with additional 10,000 acre feet available through a Placer County Water Agency contract. Current water demand was estimated to be 36,975 acre feet in Roseville, leaving Roseville with a water deficit of 10,975 acre feet of water. The USBR reduced Roseville's water supply due to lower than expected snow melt to Folsom Reservoir, Roseville's main water source, two previous dry years that have brought the lake level to a very low elevation and competing water needs from Folsom Reservoir. Area lakes, like Folsom, provide many functions other than water supply. In addition, they provide cold water for sustaining spawning of endangered species, like Chinook and Steelhead species provide water quality maintenance for the delta and agriculture water to produce food that California is known for. Water system managers from the USBR are now projecting there may not be enough water to meet all these objectives so a reduction is required

Roseville's Water Conservation Stage Two was activated a month earlier than the Statewide Drought declared by Governor Arnold Schwarzenegger. Roseville was one of the first cities in the State to take this step and has been characterized by the media as "proactive" in facing the current water shortage.

A Stage Two Water Conservation Level does the following:

- Increases water waste patrols to ensure water is being used efficiently and leaks in residential and commercial properties are repaired per the Roseville Municipal Code
- Requests all city water users to reduce their water use by ten percent (20 percent).
- Prohibits the washing of streets, parking lots, driveways, sidewalks or buildings, unless public health requires it. This does not apply to street sweepers.
- Requests restaurants not serve water, except upon request.
- Applies conditions required when washing vehicles and boats.

- **Innovative Water Conservation Measures.** 2009 saw an increase interest in innovative conservation programs by Roseville water customers. The Cash for Grass Rebate Pilot Program offered residents a chance to replace their turf with water conserving plants and landscaping. The rebate was \$1 for every square foot of turf replaced up to \$1,000 per customer. Every square foot of grass replaced with water-smart trees, shrubs and flowers saves an average of 55 gallons of water per year, so residents will also save money on their monthly water bill. The program was limited to a budgeted amount of \$60,000 with enough customers interested to commit that amount as well as generate a waiting list. The funding source for the program is the Water Conservation budget which is funded by water rates. The City is applying for grant funding to expand and continue the Cash for Grass Rebate Program in the future. The program is performance-based with a visit from City staff required before and after the turf is removed and a number of conditions required for participation.

Although its monetary scope was limited, the Cash for Grass Pilot Program brought water conservation awareness to a new height locally due to national media coverage on the program. The program was featured in virtually every local news

outlet and even on a nationally syndicated radio program.

- **Structural Improvement to 238 Vernon Street – former JC Penney Building**

Although there were some significant structural improvements made to the facades at 238 Vernon Street; structural retrofitting was not a requirement of this project. The improvements to date, as established by the DDA for the sale of this property, included interior demolition and façade renovations. The seismic work will take place as part of a future tenant improvement

- **Seismic Retrofit of BASIC – 112 Pacific Street, Old Town Roseville**

The structural upgrade of the un-reinforced masonry building at 112 Pacific Street was completed in March 2007. The project structurally rehabilitated the building, which is more than 100 years old. The upgrade used the City of San Francisco Ordinance requirements for rehabilitating un-reinforced masonry buildings, which are the most stringent requirements in the nation for this type of work. The project successfully rehabilitated a building that had been vacant for many years and created a structure that is once again safe for use. Today, Basic Urban Bar is successfully operating on the ground floor of the building and 14 efficiency units are fully rented on the upper floor of the previously empty building.

- **Seismic Retrofit of IOOF Building – 112 Pacific Street, Old Town Roseville**

On May 19, 2009, the Building Division received an evaluation of the structural integrity of the IOOF building, located in Historic Old Town. The unreinforced masonry structure is the oldest building in Roseville. Built in 1878 and a survivor of three fires that destroyed Historic Old Town Roseville in the early 1900's, the property is located in the Old Town Commercial District within the Downtown Specific Plan. As such, it is identified as a "Significant Building" in the Specific Plan and the Zoning Ordinance. The Specific Plan includes language (Policy 5.2.1) that encourages the preservation of significant buildings and incorporates the provisions of the Significant Building Ordinance, by reference.

The evaluation by a structural engineer concluded that the building was a health and safety concern and could potentially collapse during a seismic event. The report recommended either demolition or a significant seismic retrofit. Following review of the documentation prepared by the owner's structural engineer, Chief Building Inspector Gene Paolini took the following actions:

- The building was posted with a "Notice and Order";
- The property owner was given 45 days to remedy the hazardous nature of the building by: 1) demolishing the structure or, 2) by seismically retrofitting the building;



City Redevelopment Agency staff worked extensively with the property owner to provide financial assistance to save the building and complete a seismic retrofit. A long-term note was provided (15-year interest only with a balloon payment at the end) to conduct a broad-based structural retrofit. A total of \$430,000 was spent on the seismic retrofit and another \$150,000 on tenant improvements to reuse the building. In total, the Roseville Redevelopment Agency provided \$600,000 in financing to the private developer to improve the City's oldest building.

Part of the building will open for business in 2010 as a restaurant with future plans for reuse of the second floor and rooftop.

IV). Review of the Action Plan

This section will review the action plan of each planning partner and determine the status of each initiative. The following action plan matrix will provide the following information:

- Brief summary of the initiative
- Time Line
- Priority
- Status

Reviewers of this report should refer to Part 4 of the plan for more detailed descriptions of each initiative and the prioritization process. Under the "status" section of the following section the following comments with regards to each initiative:

- Was any element of the initiative carried out during the reporting period?
- If no action was completed, why?
- Is the timeline for implementation for the initiative still appropriate?
- If the initiative was completed, does it need to be changed or removed from the action plan?

TABLE PR-2. ACTION PLAN MATRIX					
Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
Drought					
D-1	Yes	Perform a groundwater recharge feasibility study to determine the most cost-effective way to replenish groundwater resources within Roseville.	Long- Term	High	Roseville continues to work with the California Regional Water Quality Control Board (RWQCB) on development of an Aquifer Storage and Recovery (ASR) program. Water was injected at Diamond Creek well from December 2005 to May 2006 and data collected to confirm project feasibility. Extraction was performed between July 2007 and February 2008 which demonstrated the success of the operation. Data compiled from tests has been submitted to the RWQB in anticipation of submittal of an operating permit application based on the findings. Roseville continues to work on development of an environmental document to accompany the permit application.
D-2	Yes	Implement aquifer storage and recovery program that uses direct injection technique in areas identified as appropriate.	Short term, on-going	High	Results of the ASR demonstration project in D-1 will provide data needed to develop a long-term program and operational plan. This will be considered in the permit application being developed at this time.
D-3	Yes	Continue to implement the Environmental Utility Department's recycled water program and seek all opportunities to expand its coverage, focusing first on the Sunset Industrial area. The City pumps recycled water through a system of purple pipes completely separate from potable (drinking water) pipes. The City pumps the recycled water to customers such as golf courses and parks, where it irrigates turf and shrubs. Using recycled water for uses such as landscape irrigation reduces demand on the potable water system, creating a more reliable water supply for the entire City. Recycled water is not subject to the effects of drought.	Ongoing	High	A Water Recycling Master Plan has been developed and is being implemented. This includes expanding recycled water in the region as well as finding opportunities in the existing service areas. Recycled water is considered as a resource in all new development areas being considered.

**TABLE PR-2.
ACTION PLAN MATRIX**

Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
D-4	Yes	Promote active water conservation techniques and strategies to private property owners through Roseville-sponsored outreach projects such as printed media and the City's website.	Short-term, Ongoing	High	<p>Roseville continues to implement the conservation program identified in the Urban Water Management Plan (UWMP) and USBR Water Management Plan required as part of our long term water supply contract. Implementation was accelerated as a result of 2009 dry conditions and resulting water shortage. A Stage 2 Drought alert has been approved on 20 February, 2009 and was removed on October 21, 2009 with City Council direction. An extensive media campaign is underway not only in print and on the web, but through television ads, utility bill messages and ongoing press releases. Water usage was over 10% less than projected through October 2009.</p> <p>The City Council approved the Water Efficient Landscape Ordinance at its November 4, 2009 meeting. In 2006, the State enacted legislation requiring the Department of Water Resources (DWR) to update the State Model Water Efficient Landscape Ordinance. The updated model ordinance contains several new landscape and irrigation design requirements aimed at reducing water waste in landscape irrigation. All local land use agencies are required to adopt the model ordinance, or develop an ordinance that is at least as effective by January 2010. Should no action be taken, the DWR model ordinance would automatically become effective in January 2010 by statute. The City of Roseville chose to adopt an Ordinance tailored to meet the City's needs based on and at least as effective as, the model ordinance. The new Water Efficient Landscape Ordinance has been incorporated into the City's Zoning Ordinance as Chapter 19.67 and supersedes the City's 1993 Water Efficient Landscape Requirements document.</p>

**TABLE PR-2.
ACTION PLAN MATRIX**

Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
Earthquake					
EQ-1	No	Perform building-specific, structural seismic vulnerability assessment of City- owned critical facilities constructed prior to 1980 (including infrastructure). Included in this assessment will be recommended mitigation alternatives that meet goals and objectives of this plan.	Short-Term/ Ongoing	High	Major construction on any city-owned building would require an assessment of the seismic vulnerability. The City will be applying for a Planning Grant under FEMA's various Hazard Mitigation Grant programs. This initiative will be included in the scope of work for updating the risk assessment to the plan...
EQ-2	No	Incorporate earthquake mitigation measures for private property into existing City-sponsored outreach programs such as printed media and the City's website.	Short-term, Ongoing	High	The California Building Officials (CALBO) website has consumer web pages and one in particular regarding Seismic Safety. The site will be upgraded and improved over time with more value to the average consumer regarding measures to improve earthquake safety.
EQ-3	Yes	Reassess the overall vulnerability to the earthquake hazard using the best available science and technology as it becomes available. State-sponsored programs, Seismic Hazards Mapping Act, and future FEMA- sponsored initiatives are anticipated to create a wealth of knowledge regarding this hazard that did not exist during the preparation of this plan.	Short- term	Medium	Council has updated the maps for the Roseville area. The Public Works Department and Building Division anticipate review and implementation of the new mapping in conjunction with the International Building Council in 2008. The seismic risk assessment of the plan will be updated using FEMA's enhanced HAZUS model (MR04) during the plan update process. The 2007 California Building Code based upon the 2006 International Building Code has been adopted and implemented in the State of California and the City of Roseville as of January 1, 2008.
EQ-4	Yes	Implement seismic construction standards under the International Building Code (IBC) as an "alternative means" code until the IBC is formally adopted as the California State Building Code.	Short- term, Ongoing	High	On January 1, 2008 the City of Roseville adopted the 2007 edition of the California Building Code (CBC) which is based upon the 2006 edition of the International Building Code (IBC). All permits applied for on or after January 1, 2008 are now plan checked and inspected based on this edition of the CBC and must meet the minimum requirements of this code.
Flood					

**TABLE PR-2.
ACTION PLAN MATRIX**

Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
F-1	Yes	The City shall designate all areas identified as the 100-year floodplain. The boundaries of the 100-year floodplain shall be as specified in the floodplain designations section of this component of the city's general plan. Floodplain areas shall be preserved as specified in the open space and conservation element. Such preservation may include required dedication to the City. If needed, modify the City's ordinances to include floodplain use regulations consistent with the goals, policies, and implementation measures of the safety, land use, open space and conservation, and parks and recreation elements of the City's general plan.	Ongoing	High	The city continued to implement its ongoing protocols and standard for identifying, mapping, and preserving the 100 yr floodplain during this reporting period. This initiative will continue to be implemented on an on-going basis, with a high priority. To comply with the upcoming implementation of the new state standard for flood control, the City has contracted with a qualified engineering firm to determine the 200-year water surface elevation for the City's streams.
F-2	Yes	Refer any development proposal that has a direct or indirect impact on flood protection to Public Works for comment. In addition, forward such proposals to other agencies as applicable, including the U.S. Army Corps of Engineers, California Reclamation Board, FEMA, California Department of Fish and Game, Placer County Resource Conservation District, and Placer County Flood Control District (PCFCD). Consider the comments of the agencies during the development review process.	Ongoing	High	The city continued to implement its ongoing protocols and standard for reviewing flooding impacts that may be caused by new developments and forward such developments to other agencies as applicable during this reporting period. This initiative will continue to be implemented on an ongoing basis, with a high priority. The PCFCD is currently conducting a region-wide hydraulic and hydrology update of the Dry Creek watershed. The study is anticipated to be completed in early 2010.
F-3	Yes	Continue City participation in the National Flood Insurance Program and the Community Rating System (CRS). Seek CRS classification improvements within capabilities of City programs, including adoption and administration of FEMA-approved ordinances and flood insurance rate maps (FIRM).	Ongoing	High	The City of Roseville continued to participate in the CRS program, and re-certified its participation during the reporting period. The City's CRS Class 1 classification became effective on October 1, 2006. Flood Insurance policy holders within the City for property owners in flood areas will receive up to a 45% premium reduction based on the classification. Roseville is the first and only CRS Class 1 community in the nation. This initiative will continue to be implemented on an ongoing basis, with a high

**TABLE PR-2.
ACTION PLAN MATRIX**

Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
F-4	Yes	Continue the City's outreach program to flood-prone property owners and the citizens of Roseville, to help make them aware of the flood threat and how best to deal with them.	Ongoing	High	<p>priority. The City will undergo the re-verification of its Class 1 in October of 2008.</p> <p>The City continued implementation of this outreach effort during the reporting period, as confirmed during the CRS verification of activity 330. This project will continue on an ongoing basis, with a high priority.</p>
F-5	Yes	Continue to pursue a regional approach to flood issues by remaining actively involved in the Placer Co Flood Control District. This involvement includes cooperative regional database. Continue to participate in regional flooding studies, including the Auburn Creek/Coon Creek/Pleasant Grove Creek flood mitigation plan and the Dry Creek watershed flood control plan.	Ongoing	High	<p>The City continued to be actively involved in the PCFCD and participate in regional flooding studies during this reporting period. Staff from the Floodplain Management Division attends the meetings on a monthly basis and a Councilmember services on the District Board. This initiative will continue to be implemented on an ongoing basis, with a high priority.</p>
F-6	Yes	Continue City coordination with other agencies on issues of flood control. Coordination between the City and adjacent jurisdictions occurs through several mechanisms, including distribution of development proposals for review and comment. Continue City cooperation with federal, state, and local agencies, including the U.S. Army Corps of Engineers, California Reclamation Board, FEMA, California Department of Fish and Game, Placer County Resource Conservation District, and PCFCD.	Ongoing	High	<p>The City continued to coordinate with other outside agencies on issues of flood control during this reporting period. The coordination typically occurs on a project-by-project basis and agencies are included in the meetings based on their particular jurisdiction or expertise. This initiative will continue to be implemented on an on-going basis, with a high priority. The City is also actively involved with the State's new Flood-Safe program.</p>
F-7	Yes	Continue to develop, implement, and expand the Flood Alert and Early Warning Program systems and integrate the systems with other local jurisdictions to form a regional warning program.	Short-Term/On-going	High	<p>The City continues to develop, implement, and expand the Flood Alert system. New "ALERT" software was installed. The Flood Warning web site was updated. These enhancements to the system were completed during the reporting period. No action was taken on an Early Warning System beyond the Roseville city limits. This initiative will</p>

**TABLE PR-2.
ACTION PLAN MATRIX**

Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
F-8	Yes	Ensure that future specific plans and specific plan amendments are consistent with the goals and policies of the general plan. The specific plans shall include the designation and preservation of floodplain areas and adjacent habitat. Provisions shall be incorporated to ensure that public infrastructure, utilities, and emergency services remain functional during flood conditions. Such infrastructure and facilities include water, sewer and gas mains, telephone and electric lines, streets and bridges, hospitals, and fire and police stations. Financing mechanisms shall be explored to fund necessary flood protection improvements and maintenance. Development agreements may be used to secure implementation and funding provisions. (Specific plans have 100% cost recovery by developers).	Short-Term/Ongoing	High	continue to be implemented on an ongoing basis with a high priority. The city continued to implement its protocols and standard for reviewing proposed public infrastructure, utilities, and other emergency services so that they would remain functional during flood during this reporting period. This initiative will continue to be implemented on an ongoing basis, with a high priority. The Sierra Vista Specific Plan is currently begin processed by the City. The areas designated as floodplain and/or natural resource conservation areas will be preserved as permanent open space, consistent with General Plan policy and this action item.
F-9	Yes	Monitor and regularly update City flood studies, modeling, and associated land use, zoning, and other development regulations at a minimum of every 5 years or whenever information becomes available that would significantly modify previous data. New information could include new studies, change in City policy, consideration of a major development project or specific plan, or implementation of a flood control project.	Short-Term	High	The City has updated the Pleasant Grove Creek flood studies. The City is also participating with the PCFCD to update the Dry Creek flood study. The Dry Creek study is still being prepared by RBF. The studies will also determine the 200-year WSE to comply with the upcoming implementation of the new state standard for flood control. The priority and timeline for this initiative will remain as assigned.
F-10	Yes	Require a master drainage plan as part of the approval process for all specific plans and large development projects as determined by the Public Works director. The master drainage plan should	Short-term, Ongoing	High	The City is working with developers to prepare a master drainage and flood study for the Sierra Vista Specific Plan. The priority and timeline for this initiative will remain as assigned.

**TABLE PR-2.
ACTION PLAN MATRIX**

Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
		consider cumulative regional drainage and flooding mitigation. The plan's intent is to ensure that the overall rate of runoff from a project does not exceed predevelopment levels. If necessary, this objective shall be achieved by incorporating run-off control measures to minimize peak flows and/or assistance in financing or otherwise implementing comprehensive drainage plans.			
F-11	Yes	Continue the Parks and Recreation Department's regular creek maintenance program within the City's creeks and floodplain areas. This program clears and removes debris that could contribute to blockage and flooding and may include the removal of silt. This is only done in areas of high risk to flood damage.	Ongoing	High	The city continued to implement its ongoing protocol of inspecting and maintaining its creeks and streams during the reporting period. The permit from the Department of Fish and Game for the 2008 has been issued and work is ongoing this summer. This initiative will continue to be implemented on an ongoing basis, with a high priority. Additionally, the City has applied for a FEMA Hazard Mitigation Grant to fund an Arundo eradication project along infested stream channels in the Dry Creek watershed..
F-12	Yes	Continue annual inspection and maintenance program of City storm drain systems. Review after every major storm system function and performance. This program removes debris that could contribute to blockage of the storm drain system.	Ongoing	High	The City continued to implement its ongoing protocol of inspecting and maintaining its storm drain system during the reporting period. This initiative will continue to be implemented on an ongoing basis with a high priority.
F-13	Yes	Complete the final two phases of the Kirby/Linda/Dry Creek flood control project (Phase 1 and 2). Five of the seven phases of this project have been completed at a cost of about \$18,000,000. The basis for determining viability of this project will be a benefit /cost analysis to determine if project meets federal grant eligibility	Long- term	Low	No actions towards the completion of this initiative were completed during the reporting period. This will continue to be a long-term initiative with a low priority pending funding. The City has applied for a FMA grant to complete a portion of phase 2.

**TABLE PR-2.
ACTION PLAN MATRIX**

Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
F-14	Yes	<p>Analyze alternative improvements to the Cirby/Linda/Dry Creek flood control project that may be cost effective in the flood-prone areas of Roseville:</p> <ul style="list-style-type: none"> • Dry Creek from Darling Way to Riverside Avenue • Area on Dry Creek upstream of Folsom Road in the Columbia Avenue/Marilyn Avenue/Bonita Street area • Linda Creek near Champion Oaks Drive/Samoa Way/Hurst Way area • Cirby Creek in the Trimble Way/Zien Court area 	Long -term	Low	This site is one of the few remaining flood-prone properties in the flood-prone Champion Oaks neighborhood. The City of Roseville purchased 1211 Champion Oaks Drive and removed all structures on the property with FMA grant funding matched by City of Roseville funding.
F-15	Yes	Replace the Huntington Drive/Cirby Creek culvert with a bridge to protect Queens Court/Huntington Drive area. The Public Works Department oversees this project.	Short- term	High	The City is continuing to research grants that may be available for this project. The City has the 25% match for the project.
F-16	Yes	Divert the main drainage storm drain system down Crestmont Avenue to Cirby Way and then into Dry Creek so that the existing system will not exceed capacity. If system capacity is exceeded, the intersection on Cirby Way and Crestmont Avenue and nearby homes will flood during major flood events.	Short- term	High	Funds were allocated for this initiative in the 07/08 capital improvements budget but were diverted to fix a culvert on Atlantic Street in downtown Roseville rather than replacing this culvert. The priority and timeline for this initiative will remain as assigned. Funding is expected to be replaced with the approval of the FY 2010/11 budget.
F-17	Yes	Continue to promote and sponsor programs to buy out, relocate, and flood-proof existing flood-prone structures within Roseville.	Short- term	High	The City will continue to pursue the acquisition of additional target properties with a high priority. The City of Roseville purchased 1211 Champion Oaks Drive and removed all structures on the property with funding from an FMA grant.
F-18	Yes	Set back and raise the sewer ponds levees at the Dry Creek Sewer Plant so raw sewage will not	Short- term, ongoing	High	The Environmental Utilities budget includes funding for the project. Plans, specifications, and

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ACTION PLAN MATRIX**

Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
		enter Dry Creek.			environmental permits are complete and construction is scheduled to begin in spring 2010.
F-19	No	Replace existing wood floodwall along Dry Creek that protects the City's Downtown Library and Public Safety Building because wood wall allows floodwater to leak through, and constant pumping is required.	Long-term	Medium	No actions towards the completion of this initiative were completed during the reporting period. This will continue to be a long-term initiative; however, the Downtown Roseville Specific Plan has identified several projects that will lessen the risk of flooding at these two critical facilities. The Public Safety Building may be relocated based on the current long-term map for downtown and preliminary studies have begun to actually armor the library by sealing the exterior and installing a flood door to protect against flood damage should Dry Creek overspill the existing floodwall.
F-20	Yes	Perform a scenario-based dam failure analysis to determine the probable impact of flooding within Roseville if western levees on Folsom Reservoir fail. These levees are part of the entire dam system that creates Folsom Reservoir and are an integral part of a dam failure analysis. An inundation area map would be prepared as part of the study.	Long-term	Medium	The City has contracted for this work as part of the 2010 Plan Update. Dam failure will be added to the risk assessment as a "hazard of concern". A key element of this analysis will be LiDAR data, provided by the State of California. The dam failure analysis will be completed in early 2010; results will be shared with the community at public meetings in spring 2010 and the final results and recommendations for mitigation will be included in the 2010 Multi-Hazard Mitigation Plan.
F-21	No	Once the dam failure analysis is complete, create a dam failure element for the City's emergency response plan.	Long-term	Low	No dam failure analysis was completed during the reporting period; therefore this task was not completed. The priority and timeline for this initiative will remain as assigned.
F-23	Yes	Develop a comprehensive interpretive sign program, including trial and open space preserve signage, at road crossings. Create creek corridor trail maps and coordinate with local schools and public stewardship events to increase public awareness of the need to preserve, restore, and	Short-term	High	Together with the Dry Creek Conservancy, the City of Roseville installed 66 creek identification signs at 33 bridge crossings in the Dry Creek watershed. The City is also actively pursuing grant funding to install the signs in the Pleasant Grove watershed. As part of developing a comprehensive interpretive sign

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Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
		proactively manage open space corridors and provide a sense of civic identity and pride. Interpretive signs are particularly important along the many trails adjacent to or that provide access to the City's open space resources, which are habitat for endangered species.			program an interpretive sign style guide was recently completed. The City's Alternative Transportation and Community Services staff completed a new park and bike trail map that was mailed to every resident in Roseville. This has been an outstanding resource to educate residents about the open space resources in Roseville.
F-24	Yes	Continue the Tree Mitigation Fund program administered by the Roseville Urban Forestry Foundation (RUFF). The planting of oak trees in the open spaces adjacent to riparian zones increases infiltration and slows storm water surges.	Ongoing	High	The RUFF program for native oak woodland restoration uses oak mitigation funds for projects in the open spaces. 2000 trees have been planted to date.
Landslide					
LS-1	No	Once California Geological Survey (CAGS) completes soils mapping for the Roseville vicinity under the Seismic Hazards Mapping Act, reassess landslide hazard using best available data to gauge the true vulnerability to this hazard.	Long-term	Medium	There was no mapping performed by CAGS in the Roseville vicinity under the Seismic Hazards Mapping Act during the reporting period. Time line and priority for this project will remain unchanged, pending action by CAGS.
LS-2	Yes	Implement soil testing standards under IBC as an "alternative means" code until the IBC is formally adopted as California State Building Code.	Short-term, ongoing	High	On January 1, 2008 the City of Roseville adopted the 2007 edition of the California Building Code (CBC) which is based upon the 2006 edition of the International Building Code (IBC). All permits applied for on or after January 1, 2008 are now plan checked and inspected based on this edition of the CBC and must meet the minimum requirements of this code.
LS-3	Yes	Continue to implement policies adopted by the General Plan that promote open space land uses within identified steep slope areas of Roseville.	Ongoing	High	The City of Roseville Northeast Roseville Specific Plan and Stoneridge Specific Plans include the identified steep slope areas within Roseville. Both plan areas have continuing development. When individual projects are submitted, for example a housing development along a ravine in the

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Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
Human Caused Hazards					
HC-1	Yes	Incorporate Crime Prevention Through Environmental Design strategies into future enhancements and revisions to community design guidelines.	Short- term	High	On March 19, 2008, the City Council approved new Community Design Guidelines (Resolution 08-142) which incorporate the Crime Prevention through Environmental Design or CPTED principles. Planning is including these requirements in new development conditions as an ongoing practice.
HC-2	Yes	Commit support to Sacramento Urban Area Security Initiative in the form of staff support from City of Roseville public safety departments. Continue to seek funding from other federal sources to fund the UASI initiatives.	Short- term	High	The Roseville Police and Fire Departments continue to support the UASI efforts with Roseville-based staffing. Battalion Chief Dean Grundy hosts Tactical Commander meetings and these meetings support the regional collaboration efforts. The sergeant's position at UASI is no longer funded and will not be filled by the Roseville Police Department.
HC-3	Yes	Enhance emergency response capability of City by contingency planning for specific events based on identified vulnerabilities.	Short-term, ongoing	High	The Roseville Fire Department received International Accreditation during the Multi-Hazard Mitigation Planning process. The Fire Department is working on a number of initiatives to maintain the accreditation and serve all customers within the City. Annual for 2006,2007, 2008 and 2009 were accepted with no deficiencies noted. The Fire Department is preparing for five year re-accreditation in 2010. The Fire Department's Hazmat Team received status as a Type I Hazardous Materials team from State OES in October 2006. Communications Supervisor Sandi Bumpus is a state-certified emergency management system (SEMS) trainer, and conducts training for City staff in

**TABLE PR-2.
ACTION PLAN MATRIX**

Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
					<p>basic and advanced knowledge of the incident command system and other elements of the state's emergency management system.</p> <p>The City's Training Division has determined that all new employees who are required to have the basic and intermediate level of ICS training (ICS 100, 200, 700, 800) obtain training and certification through FEMA's Online Emergency Management Institute's Independent Study program. Certificates are provided at the completion of the courses, and maintained in the form of individual transcripts by FEMA. Audits for compliance are completed by the training division annually.</p> <p>Thos employees required to have advanced level ICS courses (ICS 300, 400) have been identified by the City's Training Division based on NIMS requirements. ICS 300-400 training is provided annually in multiple 16-hour blocks.</p> <p>In order to meet FEMA exercise mandates, an H1N1 virus EOC drill is also being offered for department heads and key personnel in November 2009.</p> <p>Additionally, the fire and police departments and emergency medical services completed at least two large-scale multi-casualty, multi-hazard drills during FY 06/07 and one regional exercise (MCI 2008) in FY 07/08 to test and train in emergency response.</p> <p>Five police department volunteers have been trained by the Sacramento Region Citizens Corp Council in how to teach Neighborhood Emergency Training (NET), and have already made one presentation in Sun City, with the intent of offering more training to Roseville citizens through the Roseville Coalition of Neighborhood Associations.</p> <p>An additional exercise is being planned for 2010.</p>

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Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
HC-4	Yes	Seek to establish appropriate staffing levels of public safety personnel to address vulnerabilities identified.	Short Term	High	<p>The Police Chief meets quarterly with the City Manager to discuss staffing levels and needs based on current trends, population growth, and calls for service.</p> <p>Due to budget decreases from 2007 to 2009, the Police Department currently has 127 sworn positions (not all filled), a decrease from 1.2 officers to 1.13 officers per thousand city residents. There are currently 88 professional staff positions including permanent and temporary staff positions.</p> <p>The Roseville Fire Department opened Fire Station #7, including the staffing of the city's second truck company, on July 21, 2007. Additional administrative staff (three additional Battalion Chiefs – one for each of three 24 hour shifts was added in FY 2007-08. Even with these important operational staffing increases, Fire Department staffing has been reduced from 128 to 120 in the past three years.</p>
HC-5	Yes	Prepare a site-specific vulnerability assessment of City- owned critical facilities that use the best available science and technology with regards to human-caused hazards.	Long-term	Medium	<p>Through the California Emergency Management Agency, Critical Infrastructure Protection Section and the 2008 Buffer Zone Protection Program, an assessment of the Sutter Roseville Medical Center was conducted. While SRMC is not city-owned, it is designated the City's medical provider.</p>
HC-6	Yes	Develop and enhance a Continuity of Operations Plan specific to human-caused hazards.	Short-term, ongoing	Medium	<p>A Continuity of Operations Plan has been completed by Sandi Bumpus and Lieutenant Stefan Moore of the Roseville Police Department specifically related specifically to pandemic flu. According to Police staff, this COOP could be applied in any situation, including where personnel were lost due to a human-caused hazard. The Police Department COOP was reviewed in 2009 at the beginning of the H1N1 viral outbreak in this area. Training was conducted for all Police Department staff, and continues when new</p>

**TABLE PR-2.
ACTION PLAN MATRIX**

Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
HC-7	Yes	Enhance camera surveillance program to improve security at electrical substations, receiving stations, and energy park.	Short-term	High	Installation of surveillance cameras at the Roseville Energy Park is in progress and expected to be complete in fall 2008. Also this year, Roseville Electric is starting to install cameras and motion detectors in 15 substations to prevent vandalism, improve service and enhance safety.
HC-8	Yes	Address vulnerabilities identified in vulnerability assessment of water facilities performed by EUD in response to EPA initiative.	Long-term, Ongoing	High	Vulnerabilities in the City's water infrastructure were identified in a report currently kept on file in the City Attorney's Office. The Water Utility continues to take steps to implement measures identified in assessment. Increased security, monitoring, and access control systems design to cover water utility infrastructure was completed in 2009. Many other projects have been completed to date, but are not detailed in this report due to the confidential nature of the work.
Human Health Hazards					
HH-1	Yes	Continue to collaborate with the Placer County Health Department to ensure the health and welfare of the community	Ongoing	High	The City Manager's Office, Fire Department, and Communications Division collaborate with the Placer County Health Department on issues that affect the health and welfare of Roseville residents and visitors. In particular, West Nile virus communications are distributed through all media possible at the City. Staff is also participating on the Pandemic Flu Task Force. Most recently, the City has participated in communications meetings regarding severe heat potential and methods to educate the public to stay

**TABLE PR-2.
ACTION PLAN MATRIX**

Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
HH-2	Yes	Support the public education efforts of the Placer County Health Department and the Placer Mosquito Abatement District	Ongoing	High	<p>cool.</p> <p>The Roseville Fire Department created a database of all emergency responders for early warning of disease outbreaks at care facilities. This has allowed real-time surveillance data collection through a system that reports two or more calls in any one day for the same symptoms to Placer County epidemiologists. Placer County can then work with the hospitals for care and quarantines at the care facilities.</p> <p>The City supports the public education efforts of the Health Department and Mosquito Abatement District through print, government access television, and web materials. The City has also had significant assistance from the District on public outreach efforts for rodent control through presentations at neighborhood meetings.</p> <p>The Placer Mosquito Abatement District is purchasing a building in Roseville at 2021 Opportunity Drive and will move a majority of the operations to Roseville. This will enhance the availability of resources in closer proximity to Roseville residents and the mosquito-breeding areas west of Roseville.</p>
HH-3	Yes	Collaborate with the Placer County Mosquito Abatement District to review resource protection policies that conflict with human health protection in the City of Roseville and work to resolve these policy issues	Short-term	High	<p>The Placer Mosquito Abatement District and Roseville Environmental Coordinator is working together to both protect open space and wetland areas while limiting the amount of habitat for mosquitoes and vectors. The City worked diligently with the technicians from the abatement district during the height of the West Nile virus in Roseville in summer 2005 making exceptions to policies regarding beaver dams and clearance of habitat in creeks to make sure all mosquito breeding areas</p>

**TABLE PR-2.
ACTION PLAN MATRIX**

Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
HH-4	Yes	Continue the Roseville Shade Tree Program, a community service and energy conservation program sponsored by Roseville Electric and administered by the Roseville Urban Forest Foundation (RUFF). The planting of a diverse variety of tree species through the Roseville Shade Tree Program improves the overall air quality. Energy conservation programs have a primary goal of reducing the peak electric load caused by high energy demand and therefore reduce pollutants.	Ongoing	High	identified by the district were eliminated. Since inception, the program has placed over 15,000 urban forest trees throughout the City. During FY08, 1000 trees were planted.
Severe Weather					
SW-1	Yes	Continue ongoing program of conversion of overhead utilities to underground service.	Ongoing	High	Roseville Electric is working jointly with Comcast and SureWest to underground utilities. Work has been completed in the Historic District, Roseville's oldest area. This will improve reliability in the area and improve aesthetics. Another older commercial area will be improved in 2008 – the Riverside Avenue corridor as part of the Riverside Master Plan construction work. By jointly under grounding the telecommunications utilities as well, reliability in the communications area will also be improved in the event of an emergency.
SW-2	Yes	Purchase mobile generators to provide redundancy for electrical utilities.	Short- term	High	Roseville Electric purchased a large mobile generator and enough smaller generators to loan to other departments or even critical facilities that are private in the event of an emergency. These are stored at Roseville Electric and are available by request.
SW-3	Yes	Continue the Shade Tree Program, a community service sponsored by Roseville Electric and Roseville Urban Forest Foundation.	Ongoing	High	The Shade Tree Program incorporates the "right tree, right place" philosophy for tree placement. Trees are planted for energy conservation and to avoid future hazards with overhead and underground

**TABLE PR-2.
ACTION PLAN MATRIX**

Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
SW-4	Yes	Continue ongoing line clearing and weed abatement of electrical utilities to reduce exposure to severe weather hazards.	Ongoing	High	<p>utilities. Trees rebated through the Shade Tree Program are sited to minimize potential infrastructure damage during storms. Since inception, the program has placed over 15,000 urban forest trees throughout the City. During FY2009, over 1000 trees were placed..</p> <p>Roseville Electric has a very aggressive line clearing and weed abatement program. The Department contracts for the service and is continually evaluating the cost effectiveness for the program. Electric senior staff is evaluating this year whether the trimming program should be a division within Roseville Electric and will make that determination this next fiscal year.</p>
SW-5	Yes	Continue education/outreach programs to improve winter preparedness and minimize loss of life or injury.	Short-term, ongoing	High	<p>Educational materials are included on the city's web site on an ongoing basis, as well as a weekly tip sheet sent to all local media (print/broadcast). Web content is available to any viewer with a personal computer and Internet access. Typically there is also at least one city-authored column in the Roseville Press-Tribune on this topic per year – which reaches 40,000 readers.</p> <p>No change in the debris management and removal strategy was adopted this past year. The Parks Department purchased new equipment this fiscal year that aids in the removal of hazardous debris with less damage to the banks of the creeks.</p> <p>The Roseville Energy Park (REP) which opened in October 2007 and has been fully operations since January 2008, is producing power and provides additional electric support to meet the City's electrical needs. In the event of a transmission line outage the REP will help maintain electric service continuity.</p>
SW-6	Yes	Enhance and implement strategies for debris management and removal during severe weather events.	Ongoing	High	<p>No change in the debris management and removal strategy was adopted this past year. The Parks Department purchased new equipment this fiscal year that aids in the removal of hazardous debris with less damage to the banks of the creeks.</p> <p>The Roseville Energy Park (REP) which opened in October 2007 and has been fully operations since January 2008, is producing power and provides additional electric support to meet the City's electrical needs. In the event of a transmission line outage the REP will help maintain electric service continuity.</p>
SW-7	Yes	Continue to operate the Roseville Energy Park to support the City's electrical requirements and maintain service continuity during severe weather events.	Ongoing	High	<p>No change in the debris management and removal strategy was adopted this past year. The Parks Department purchased new equipment this fiscal year that aids in the removal of hazardous debris with less damage to the banks of the creeks.</p> <p>The Roseville Energy Park (REP) which opened in October 2007 and has been fully operations since January 2008, is producing power and provides additional electric support to meet the City's electrical needs. In the event of a transmission line outage the REP will help maintain electric service continuity.</p>

**TABLE PR-2.
ACTION PLAN MATRIX**

Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
Wildfire					
WF-1	Yes	Continue ongoing line clearing and weed abatement of electrical utilities to reduce exposure to fire and severe weather hazards.	Ongoing	High	This is an ongoing program of Roseville Electric to both protect the public from hazards and to maintain the reliability of electricity service to Roseville Electric's more than 50,000 customers.
WF-2	Yes	Continue "Goat Grazing" program for removal of grassland in areas of Roseville potentially vulnerable to wildfire. Implement goat grazing in City open space and preserve areas for fire and invasive plant species management and native plant restoration.	Ongoing	High	The Fire Department and the Open Space Management Division continue working together to implement a goat grazing program. Projects in 2009 include the open space area located east of Dry Creek near Lincoln Estates Park between James Drive and Harding Boulevard. The area was grazed during the summers of 2007 and 2008 and greatly reduced the fire danger. The other areas include open space along Dry Creek behind Saugstad Park and St. Rose School.
WF-3	Yes	Enhance existing City public outreach programs to include information on fire safety, defensible spaces, and areas of concern.	Short-term Ongoing	High	The Fire Department continually evaluates the efficiency and effectiveness of its public education programs. Comparison with other accredited fire agencies reveals that our performance standards meet those of other agencies. Outreach efforts include seasonal safety messages through the media and City website. Public education programs have been reduced, modified or eliminated due to reduction in staff.
WF-4	No	Purchase a minimum 4,000-gallon water tender with wildfire fighting capability.	Long-term	Low	No Action Taken. This is not in the Fire Department's current goals but does remain an option if large amounts of open space are annexed into the City. Time-line and priority remain as amended during the first reporting period.
WF-5	Yes	Consider adopting building code regulations that would allow only class "A" roofing on new or substantially improved structures.	Short-term	Medium	The Fire Marshal and Chief Building Official reviewed the need for a citywide Class A roofing requirement. Given Roseville's location, the limited amount of urban wildland interface property, and current agreements at the specific plan level that address

**TABLE PR-2.
ACTION PLAN MATRIX**

Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
WF-6	Yes	<p>Enhance wildfire-fighting capabilities of the Fire Department through approaches that include</p> <ul style="list-style-type: none"> • Use of gel for fire protection of threatened structures, • Equipment with adequate supplies of class A foam, • Expanded vegetation management areas, • Enhanced wildfire training for response personnel, and • Establishment of a reserve supply of wildfire fighting land equipment. 	Short-term	High	<p>this issue quite extensively, the officials are stating that a citywide requirement is not necessary. Currently, a Class A roofing requirement is evaluated at the Specific Plan level, i.e., Stoneridge, and applied through a development agreement as appropriate.</p> <p>All Fire Department wildland apparatus use Class foam with additional supplies available for large incidents. The foam is kept in stock and all firefighters are trained in its use. The Fire Department will not use gel in the future due to costs to retrofit equipment and the lack of a need to use the gel. This item will be deleted in the plan update.</p>
Multiple Hazards					
MH-1	Yes	Adopt IBC as amended once approved as the California State Building Code.	Short- term	High	On January 1, 2008 the City of Roseville adopted the 2007 edition of the California Building Code (CBC) which is based upon the 2006 edition of the International Building Code (IBC). All permits applied for on or after January 1, 2008 are now plan checked and inspected based on this edition of the CBC and must meet the minimum requirements of this code.
MH-2	Yes	Continue to seek OES certification of all City inspectors for post-disaster damage assessment.	Ongoing	High	All City building inspectors are OES certified and have been recertified this year. The Building Division will continue to make sure staff keeps their certifications updated and that the certifications are documented per the International Accreditation requirements.
MH-3	Yes	Establish hazard mitigation page on City website that provides following types of information:	Short-term	High	The City will update the RHMP and any progress report(s) as directed. The City is in the process of

**TABLE PR-2.
ACTION PLAN MATRIX**

Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
		<ul style="list-style-type: none"> • RHMP and its progress report(s) • Hazard-specific information • Mitigation information by hazard, with specific emphasis on private property • Emergency response and warning information • Links to county, state, and federal related agencies 			<p>detailing information regarding hazard-specific preparation and recovery, and staff is exploring participating in SacramentoReady.org, the Sacramento city/county website that has similar information, and will be heavily promoted to the media and public during emergencies. Staff is also continuously gathering and posting emergency response and warning information and listing other government agencies that offer advice and assistance on the City's website.</p>
MH-4	Yes	<p>Review existing automatic/mutual aid agreements with outside public safety agencies to identify opportunities for enhancement.</p>	Short-term, ongoing	High	<p>An automatic aid agreement with all western Placer County Fire Departments was entered into in early 2006. This clearly enhances the level of support from other fire agencies into the City of Roseville in large-scale emergencies.</p> <p>In 2008 the Roseville Fire Department began a review of existing automatic and mutual aid agreements to ensure that our standards of coverage are adequate into the future and to explore expanding agreements with the Sacramento Metro Fire District to the south. Existing agreements are adequate.</p>
MH-5	Yes	<p>Establish post-disaster action plan to be part of the City Emergency Operations Plan that will include following elements:</p> <ul style="list-style-type: none"> • Procedures for public information • Post-disaster damage assessment • Grant writing • Code enforcement • Redundant operations 	Short-term	High	<p>A post-disaster action plan is included in the City Emergency Operations Plan. The Plan is updated periodically included the protocol for public information, damage assessment and redundant operations. City grant writing and code enforcement are also ongoing and continually updated to remain current.</p>
MH-6	Yes	<p>Relocate City Emergency Operations Center out of the floodplain, and construct new facility to current</p>	Short-term	High	<p>The City of Roseville primary EOC will be located within the library/community center/public access</p>

**TABLE PR-2.
ACTION PLAN MATRIX**

Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
		seismic standards; this project would mitigate impacts of flood, earthquake, and human-caused hazards.			center at Mahany Park. The facility opened to the public on January 27, 2008. In May of 2008, the City's department heads received an orientation of the new EOC at the Martha Riley Library. Final preparations of the new EOC location are scheduled to be complete in time for an October 2008 tabletop exercise.
MH-7	No	Implement an "Adopt an Open Space" program in coordination with the open space management program. Develop "adoption contracts" with neighborhoods, organizations, businesses, etc., describing the level of stewardship and the terms of the "adoption." Publicize these activities through online resource directory and other media to encourage participation.	Short-term	Medium	The City did not implement an Adopt an Open Space program but was successful in hiring a full-time Open Space Manager and an Urban Forester. These positions have coordinated the stewardship and community involvement in maintaining the open space. They have also prepared an online resource directory and other media such as local cable access programs to promote Roseville's open space resources. With the addition of these positions, staff will continue to pursue the implementation of an "Adopt an Open Space" program.
MH-8	Yes	Develop and disseminate best practices information to private property owners whose land is adjacent to open space areas describing stewardship opportunities and owners' role in preserving beneficial uses of open space areas (including vernal pool grassland and creek or riparian uses). Offer classes to provide in-depth information, such as demonstration projects, techniques for ecologically friendly weed abatement and vegetation control, and creating a backyard habitat compatible with open space areas.	Short-term	High	A brochure entitled, "Doing Your Part to Care for Our Open Space" was created in 2007 and provides best practices information for private property owners. Brochures produced by other organizations such as the California Invasive Plant Council are also being utilized and distributed. Additional information will also be posted on the city's open space webpage during the upcoming year.
MH-9	Yes	Work with the Roseville City School District, local high school districts, and non-profit organizations to promote ecology-oriented curricula and stewardship activities. Identify resource and	Short-term	Medium	Together, the City of Roseville, the Dry Creek Conservancy, and the Roseville Urban Forest Foundation offered multiple stewardship activities including tree plantings, invasive species removal

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Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
MH-10	No	<p>administrative barriers that may be limiting schools' abilities to more actively participate in stewardship, and work collaboratively to identify solutions.</p>			<p>projects, workshops, nature walks and cleanups. This year for Creek Week, the City of Roseville partnered with the Placer Nature Center, and Sierra College to organize the second Placer County Earth Day on April 18th. Nearly 3,000 visitors came to a full day of environmental education activities, food, and entertainment. This event was widely publicized in local newspapers reaching over 70,000 households throughout Placer County. The City of Roseville hosted a "Placer Recycles Day" in 2009 with 200 attendees and over 250 attended "Solar Day" 2009. The Utility Exploration Center has hosted 65,000 visitors to the Center since opening in January 2008. Visitors learn about climate change, conservation, and energy efficiency at the tour.</p> <p>No action was taken with regards to this initiative during the reporting period. Time-line and priority for this initiative were changed during the 2006 reporting period.</p>
MH-11	No	<p>Institute a city program requiring a "Resale Property Report" for all sale of developed real property for a fee. The report would disclose information on hazards to be provided to a prospective buyer. This disclosure would be consistent with the requirements of California Civil Code #1102. Revenue generated would fund services provided and could be used to fund minor mitigation projects within the City identified in this plan.</p> <p>Manage beaver dam sites for flood control protection and habitat restoration after dam removal. One primary issue is impacts to floodwater capacity of creeks. Part of the desired comprehensive approach to beaver management includes establishment of quantitative and qualitative "carrying capacity," including acre-feet of flood capacity lost. Implement a standard</p>	Long-Term	Low	<p>City Staff has been proactively managing beaver dams following the City's Beaver Management Policies. . In 2009, we began tracking beaver dams on GIS mapping system to be able to monitor past sites and track beaver patterns based on geography</p>

**TABLE PR-2.
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Action Identifier	Action taken Yes/No	Initiative Description	Time Line	Priority	Status
		monitoring and reporting process to track beaver dam locations, population, and impacts. Gain regulatory approval for beaver management techniques such as biological control and habitat manipulation using the most benign options first.			

V.) Changes within the Planning area that may impact implementation of the plan

During the reporting period, there were no significant changes within the planning area that would have a profound impact on the implementation of the plan. All technical, regulatory and financial capabilities identified by the City during the plan's development remain consistently in place throughout the planning area.

VI.) Recommendations for Changes or Enhancements

The recommendations for changes or enhancements are being incorporated into the 2010 Multi-Hazard Mitigation Plan Update and therefore are not included in this Progress Report.

Public review notice: *The contents of this report are considered to be public knowledge and have been prepared for total public disclosure. Copies of the report have been provided to: the governing bodies of all planning partners, the local media outlets, and posted on the City of Roseville Multi-Hazard Mitigation Plan website. Any questions or comments regarding the contents of this report should be directed to:*

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