Assuring the Health and Safety of the Community

Part IV

Goal 5

Protecting Community Health and Safety, and Preparing for Emergencies

It is important to recognize that one of Ross' greatest assets could become one of its greatest liabilities. Our tree-covered landscape could become fuel for fires that could char and destroy our land and homes. Our scenic hillsides can fall victim to unrelenting winter rains, causing landslides, mudslides and erosion. Like all of the Bay Area, we are also always at risk from earthquake. Planning is needed to minimize the potential for loss of life, injury and property damage from any natural disaster.

Major New Ideas

- Prepare Water System (Pressure) Master Plan
- Implement Ross Valley Emergency Preparedness

OUR VISION OF ROSS IN YEAR 2025

The health and safety of the community are critical concerns. We have worked to prepare and practice emergency response and to minimize risks of fire danger by emphasizing responsible landscaping practices (especially in the steeper, less accessible areas of the Town). Additionally, we have worked to minimize noise pollution.

Ross General Plan Policies

5.1 Location of Future Development. Development will only be permitted in areas where risks to residents can be adequately mitigated.

5.2 Geologic Review Procedures. At the time a development is proposed, Ross geologic and slope stability maps should be reviewed to assess potential geologic hazards. In addition, suitability for development must be based on site-specific geotechnical investigations.

5.3 Fire Resistant Design. Buildings should be designed to be fire defensive. Designs should minimize risk of fire by a combination of factors including, but not limited to, the use of fire-resistant building materials, fire sprinklers, noncombustible roofing and defensible landscaping space.

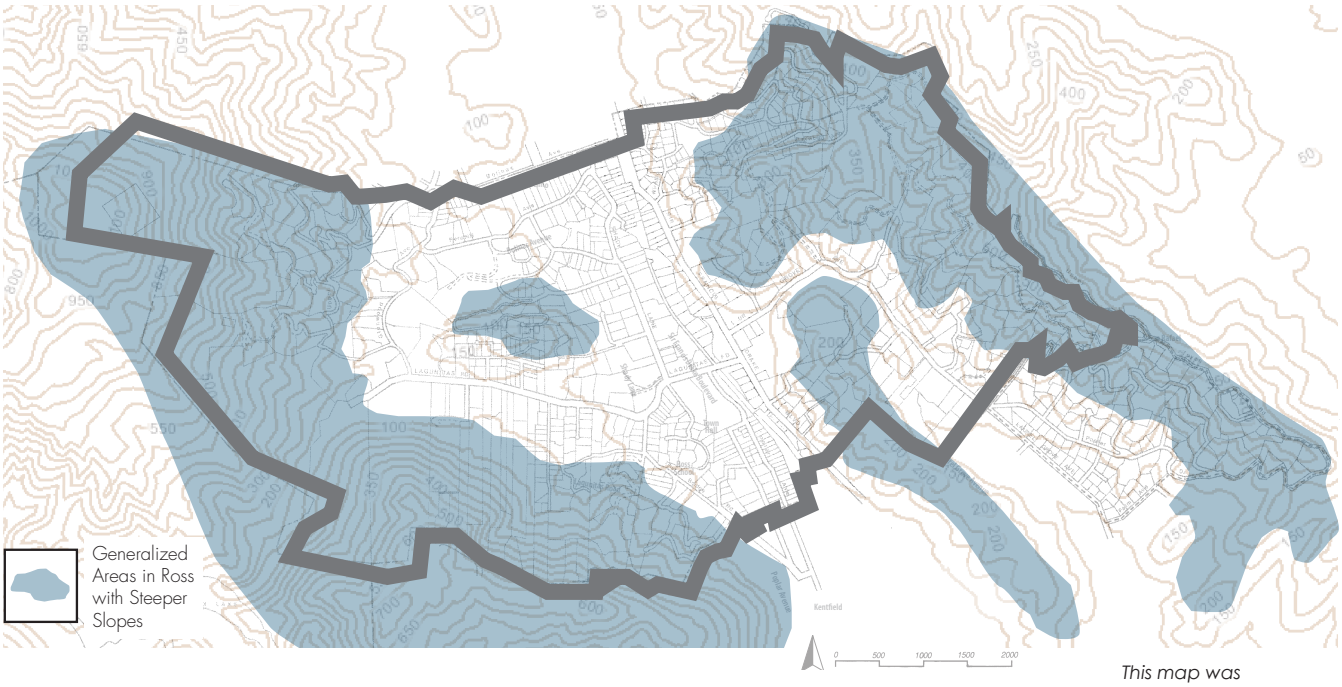
5.4 Maintenance and Landscaping for Fire Safety. Ensure that appropriate fire safety and landscaping practices are used to minimize fire danger, especially in steeper areas. Due to the high fire hazard in the steeper areas of Town, special planting and maintenance programs will be required to reduce fire hazards in the hills and wildland areas, including removal of invasive non-native vegetation such as broom, acacia and eucalyptus.

5.5 Fire Safety in New Development. New construction will adhere to all safety standards contained in the Building and Fire Code. Hazards to life and property shall be minimized by such measures as fire preventive site design, fire resistant landscaping and building materials, and the use of fire suppression techniques and resources.

Steeper hillsides in Ross (looking south)

Figure 7

Generalized Areas in Ross with Steeper Slopes



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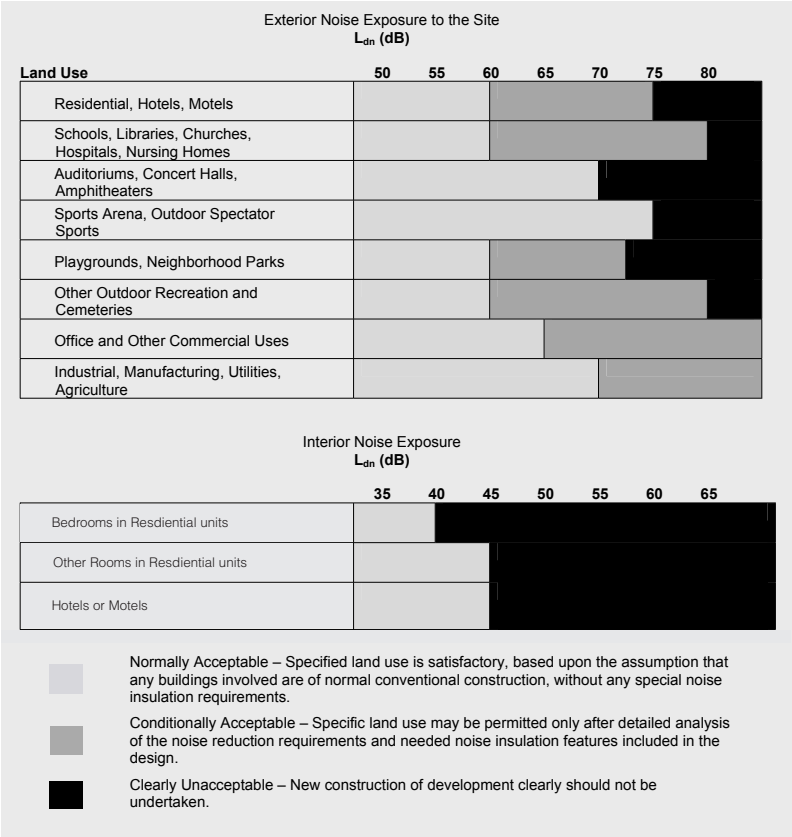
5.6 Noise/Land Use Compatibility Standards. The Land Use/Noise Compatibility Standards (see Figure 8) apply to the siting and design of new structures and substanital remodels. Any project that is located in a "conditionally acceptable" or "normally unacceptable" noise exposure area will be required to prepare an acoustical analysis. Noise mitigation features may be required by the Town.

5.7 Noise Standards for Exterior Residential Use Areas. The noise standard for exterior use areas (such as backyards) in residential areas is 55dB (decibels) Ldn (a day-night weighted 24-hour average noise level). All areas of Ross meet this standard except for those properties located along Sir Francis Drake Boulevard. General Plan policy requires that any new residential construction meet this standard.

Figure 8
Land Use/Noise Compatibility Standards



5.8 Interior Noise Standards. Protect the community against the effects of intrusive and unhealthy exterior noise sources. Establish interior noise standards for new residential and residential health care projects of 40dB (Ldn) for bedrooms and 45dB (Ldn) for other rooms — decibel levels determined based on a day-night weighted 24-hour average noise level.

5.9 Noise Generated by Commercial Projects. Design of commercial projects should be sensitive to noise impacts on surrounding neighborhoods.

5.10 Traffic and Construction Noise. Require mitigation of construction and traffic noise impacts on the ambient noise level in the Town.

5.11 Hazardous Materials Storage and Disposal. Require the proper use, storage, and disposal of hazardous materials to prevent leakage, contamination, potential explosions, fires or the escape of harmful gases, and to prevent individually innocuous materials from combining to form hazardous substances, especially at the time of disposal.

5.12 Access for Emergency Vehicles. New construction shall be denied unless designed to provide adequate access for emergency vehicles, particularly fire fighting equipment.

5.13 Town Responsibilities for Emergency Preparation and Response. Undertake emergency preparedness planning in cooperation with other public agencies and local organizations. Publicize emergency plans, provide information on disaster preparedness to residents and businesses, and continue essential Town emergency public services during natural disasters.

Overview of Our Past Accomplishments

As development has been proposed on the least developable hillside lots in Ross, the Town has required thorough review by outside hydrologists and geologists to ensure that potential hazards such as erosion, landslide and debris flow are fully addressed and mitigated. New development in geologically hazardous areas is not approved without first demonstrating that the proposed construction will not result in on-or off-site dangerous conditions.

Heavy vegetation can also create fire hazards

Fire risk in Ross is high due to vegetation, steep topography and climactic conditions. The Town's Fire Department reviews all development applications, and new construction must meet fire safety standards and provide adequate access for emergency vehicles. The Town's Hillside Lot Ordinance further requires clearing of brush, installation of class "C" roofing, and replacement of inadequate water lines and fire hydrants to ensure a sufficient water supply for fire fighting.

Action List of New Ideas

5.A Prepare Water System (Pressure) Master Plan. Coordinate with the Marin Municipal Water District (MMWD) to evaluate water pressure and water lines to ensure adequate fire protection. Identify locations where improvements are needed and adopt requirements and funding mechanisms in coordination with MMWD to implement these improvements.

5.B Implement Ross Valley Emergency Preparedness. Initiate discussions with other Ross Valley jurisdictions to consider opportunities to jointly respond to emergencies such as flood, fire, earthquake or other emergency situations. Cost savings and coordination opportunities could include the creation of a Town staff disaster planning coordinator, formation of a disaster preparedness committee reporting to Town staff (resident volunteers, Town official), sharing of resources and development of outreach programs to residents and businesses to provide training and information about disaster preparedness.

Goal 6
Protecting Creek Habitat and Reducing Flooding Hazards

Creek drainageway

Fueled by heavy winter rains, Corte Madera Creek can turn from a peaceful stream in the summer and fall months into a raging river in the winter months. Throughout history, and most recently during the New Year's Eve Flood of 2005, there was massive and widespread flooding in the low-lying areas of Town when the creek overflowed its banks in Ross and San Anselmo. Our region's historic pattern of developing the flat lands along Corte Madera Creek in the Ross Valley leaves us vulnerable to the whims of nature.

Major New Ideas

- Participate in Ross Valley Flood Protection and Watershed Program
- Develop Rules Regarding Runoff
- Develop Regional Land Use Regulation

OUR VISION OF ROSS IN YEAR 2025

Flood control improvements have been made and a new creek management program has been completed. All new structures are above the 100-year flood elevation in the downtown area and in new and remodeled houses located along the creeks and in the low areas. Houses in the floodplain have been granted expedited Council approval to be raised above flood levels and all businesses have installed flood protection mitigation. Specific standards for upstream mitigation and drainage system restoration have been implemented and overall runoff reduced.

Ross General Plan Policies

6.1 Flood Protection in New Development. All new construction and substantial remodels within the 100-year floodplain must comply with the Town's floodplain regulations.

6.2 Flood Control Improvements. The Town supports the construction of flood control improvements consistent with the natural environment, the design character of the Town of Ross and the safety and protection of persons and property.

6.3 Ross Valley Flood and Watershed Protection. The Town will work with other jurisdictions within the Ross Valley watershed to develop a comprehensive approach to flood protection and resource preservation strategies.

6.4 Runoff and Drainage. Stormwater runoff should be maintained in its natural path. Water should not be concentrated and flow onto adjacent property. Instead, runoff should be directed toward storm drains or, preferably to other areas where it can be retained, detained, and/or absorbed into the ground.

6.5 Permeable Surfaces. To the greatest extent possible, development should use permeable surfaces and other techniques to minimize runoff into underground drain systems and to allow water to percolate into the ground. Landscaped areas should be designed to provide potential runoff absorption and infiltration.

Creek access

6.6 Creek and Drainageway Setbacks, Maintenance and Restoration. Keep development away from creeks and drainageways. Setbacks from creeks shall be maximized to protect riparian areas and to protect residents from flooding and other hazards. Encourage restoration of runoff areas, to include but not be limited to such actions as sloping banks, providing native vegetation, protecting habitat, etc., and work with property owners to identify means of keeping debris from blocking drainageways.

6.7 Riparian Vegetation. Protect existing creek and riparian vegetation and encourage the use of native species during creek restoration. Assure that modification of natural channels is done in a manner that retains and protects creekside vegetation, integrates fish passage and includes habitat restoration in its natural state.

Figure 9

Generalized Areas in Ross Subject to Flooding and Potential Dam Inundation

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Overview of Our Past Accomplishments

Ross is a member of the Marin County Stormwater Pollution Prevention Program (MCSTOPPP), which is the leader in stormwater management within the Bay Area. Programs encourage public participation, education and appropriately designed development to curb water pollution in Marin County. The Town encourages practices that enable water to percolate into the surrounding soil, instead of letting sediment, metals, pesticides and chemicals run off directly into waterways or the storm drain system.

Creek drainageway from Phoenix Lake

Many of these development practices also help to reduce stormwater flow. In particular, gravel driveways, permeable pavers and grass-lined drainage ditches on the side of the roads (as opposed to curbs and sidewalks) enhance water absorption and filter out pollutants, such as hydrocarbons.

Most of the land adjacent to Ross Creek and Corte Madera Creek is in private ownership. Therefore, educating homeowners about the best ways to stabilize banks and care for creeks has been important. Techniques include biotechnical bank stabilization, which utilizes native plants and natural materials for banks. In addition, rocks can be used at the toe of the bank to provide bank stabilization, and to provide shelter and feeding areas for trout. The Marin Art & Garden Center showcases a variety of native plants that are appropriate for riparian areas.

In a coordinated effort, the County of Marin and the municipalities of Fairfax, Larkspur, Ross and San Anselmo have been working together on the Ross Valley Flood Protection and Watershed Program with three main objectives: (1) achieving comprehensive flood damage reduction, (2) conserving and enhancing the natural creek network, and (3) providing an affordable local financing plan.

Generalized areas in Ross subject to flooding and potential dam inundation are shown in Figure 9, and areas affected by the New Year's Eve flood of 2005 are shown in Figure 10. After the 2005 New Year's Eve flood the Town fast-tracked applications and waived fees to raise houses, and more than a dozen property owners took advantage of this program to raise their houses up above 100-year floodplain levels.

Action List of New Ideas

6.A Participate in Ross Valley Flood Protection and Watershed Program. Work with other Ross Valley jurisdictions to address a watershed-wide approach to drainage, warning systems, emergency response, and flood insurance programs.

6.B Develop Rules Regarding Site Runoff. Develop guidelines that limit the coverage of impervious surfaces, that require the use of permeable surfaces, that implement other regulations to effectively channel and minimize site runoff, and that allow water to percolate into the ground.

6.C Develop Regional Land Use Regulation. Work with other Ross Valley jurisdictions to explore and adopt land use regulations to minimize additional runoff, or reduce runoff, within the Ross Valley watershed.

Salmon in Corte Madera Creek
(photo courtesy of Friends of Corte Madera Creek)

Figure 10
Properties Affected by the New Year's Eve Flood of 2005
(Ross Valley Flood Protection and Watershed Program)