



Town of San Anselmo, California

Flood Mitigation Plan

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TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

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Town of San Anselmo Flood Mitigation Plan

Executive Summary

The Town of San Anselmo's (Town) Disaster Mitigation Plan required by the Disaster Mitigation Act (DMA 2000) and approved by the Town Council in 2005, includes a mitigation strategy to review and update the Town's Flood Hazard Mitigation Plan. These two plans are closely tied together. The Town plans to merge these two hazard mitigation planning processes together avoiding duplication of effort as well as reducing demands on staff time.

In support of the Town's hazard mitigation efforts the State of California Governor's Office of Emergency Services (OES) has made U.S. Department of Homeland Security Federal Emergency Management Agency (FEMA)-FMA non-competitive grant money available to the Town to update their Flood Mitigation Plan.

The Town conducted a public outreach program to all citizens in danger of flooding inviting their participation and input into flood mitigation planning. The outreach goal was to reach 90% or more of all of the flood-prone properties. The Town utilized public mailings, meetings, Town Website Newsletters, email to all interested residents from the Town Manager, and Public Information releases to accomplish this outreach. As part of this program the Town made flood information available in public places such as the Library and Town Departments. The results of the public outreach program are included in this Plan

The Town intends to continue to strengthen the working relationships and coordination developed through this process with Marin County, the Marin County Flood Protection District, the Ross Valley flood affected citizens, the Marin County Board of Realtors, the Ross Valley Fire Department, and State and Federal Agencies as well as any other interested stakeholders including transportation and law enforcement organizations.

The Plan includes an inventory of the flood hazard areas, the identification of parcels with structures within those areas, and a damage cost estimate or risk loss to those properties in a 100-year flood event. This data will allow the Town to accurately assess the cost benefit analysis of flood mitigation strategies. The Town formed a Flood Committee with the Vice Mayor, Peter Breen, as the Chairperson. This group will have an ongoing relationship through their work with the public and the stakeholders to formulate and update this plan on an annual basis. The Plan identifies historic and future flooding problems and ongoing flood studies, mapping and research.

The Plan calls for review of the Town's Elevation Certificate process to determine its current applicability. The Town will update the Municipal Code Elevation Certificate process as required. The Town conducts ongoing reviews of building and code standards and floodplain ordinances to affirm the most recent practices are reflected. The Town continues to review and update its local mapping system including the floodplain areas and will explore additional opportunities to support flood mitigation. The process also includes reviewing drainage system maintenance and capital improvements for update. It is the intent of this Plan to include a methodology to identify and update the Town's hotspot areas that flood during storms and to look for improvements for the Town's surface water drainage systems. The Town intends to use this plan to identify work for drainage projects. The Town has used this planning process to explore a number of mitigation strategies including the development of a flood-warning plan.

Section I - Planning Process

Part 1 - Process Organization

Planning Process Documentation

Part 1 includes documentation of the planning process and public involvement. Meeting agendas, minutes, Town emails, letters and public outreach are presented in Part 2.

Jurisdictional Participation

Marin County Flood Control and Water Conservation District

Ross Valley Watershed Group

Association of Bay Area Governments

Towns of Fairfax and Ross, and the City of Larkspur

Process Description

The Town of San Anselmo formed a Flood Committee that meets regularly. Included in this section are the agendas and minutes for those meetings.

Summary of the Town's Planning Process

The work of this Committee is documented throughout this section:

(Posted on the Town Website, January 2006)

"The Town Council invites interested residents to apply for a seat on the newly-formed ad hoc Flood Mitigation Working Group. The group will be made of five community members along with two Council Members. Interested residents with expertise, experience or education in flood control, hydrology or engineering are invited to apply for appointment. A resume and letter of interest should be submitted to the Town Administrator by Monday February 6, 2006 at 3:00 P.M.

The charge of the group is to learn about the creek conditions in San Anselmo, review past work on flood control efforts and advocate for immediate and long-range actions and advise Council representatives on regional Ross Valley Flood control efforts."

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- The Town utilized its disaster recovery contracting procedures to hire a consultant to assist the Town in gathering and assessing flood recovery data.
- The Town formed a Flood Committee and worked extensively to update and assess the potential flood problems caused by creeks and run off.
- The Flood Committee held extensive meetings with the Ross Valley Watershed Group and the citizens of San Anselmo. The Town further utilized email, telephone, newsletters, local media, and its web site to contact and interact with the citizens of San Anselmo regarding flood issues.
- The Town engaged citizens in mitigation strategies to protect homes and property through elevation, flood walls and flood gates for the Town's business community and home owners.
- The Town assessed its recovery efforts from the 2005/06 floods and applied the lessons learned to this flood document.
- The Plan has been reviewed and adopted by the Town Council and forwarded to the State of California OES and FEMA for review.

Existing Information

- FEMA Robert T. Stafford Act 93-288
- FEMA Flood Insurance Study – Town of San Anselmo, California
- FEMA Flood Insurance Study – Marin County, California
- State of California, Governor's Office of Emergency Services
- Ross Valley Watershed Group Council Approval
- San Anselmo flood codes and ordinances as listed below. Because the FEMA Flood Maps do not accurately reflect the flooding in San Anselmo the Town has passed an ordinance to raise its building and code standards to what they have identified as the actual flood levels.

San Anselmo Code with Regard to Flooding

Note to Chapter 14.

* Chapter 14 entitled "Accumulative Supplement to the Uniform Codes", consisting of Section 9-14.01, codified from Ordinance No. 744, effective June 22, 1978, as amended by Ordinance No. 790, effective November 27, 1980, Ordinance No. 851, effective April 26, 1984, Ordinance No. 881, effective May 8, 1986, Ordinance No. 908, effective February 22, 1990, and Ordinance No. 934, effective September 10, 1992 was deleted in its entirety by Ordinance No. 1010, effective October 28, 1999. Chapter 17 of Title 9 entitled "Protection of Flood Hazard Areas" consisting of Article 1, Sections 9-17.101 through 9-17.104, Article 2, Section 9-17.201, Article 3, Sections 9-17.301 through 9-17.307, Article 4, Sections 9-17.401 through 9-17.403, Article 5, Sections 9-17.501 through 9-17.505, Article 6, Sections 9-17.601 and 9-17.602, and Article 7, Section 9-17.701 codified from Ordinance No. 898, effective May 12, 1988, was moved to Chapter 14 of Title 9 without amendment by Ordinance No. 1010, effective October 28, 1999.

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Article 1. Statutory Authorization, Findings of Fact, Purposes and Methods

9-14.101 Statutory authorization.

The Legislature of the State of California has in Government Code Sections 65302, 65560 and 65800 conferred upon local governmental units authority to adopt regulations designed to promote the public health, safety and general welfare of its citizenry. Therefore, the Town Council ordains the provisions set out in this chapter. (§ 2, Ord. 1010, eff. October 28, 1999)

9-14.102 Finding of fact.

The flood hazard areas of the Town are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare. (§ 2, Ord. 1010, eff. October 28, 1999)

9-14.103 Statement of purpose.

It is the purpose of this chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

- (a) To protect human life and health;
- (b) To minimize expenditure of public money for costly flood control projects;
- (c) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (d) To minimize prolonged business interruptions;
- (e) To minimize damage to public facilities and utilities such as water and gas mains, electric telephone and sewer lines, streets and bridges located in areas of special flood hazard;
- (f) To help maintain a stable tax base by providing for the development and redevelopment of areas of special flood hazard so as to minimize future blight areas;
- (g) To insure that potential buyers are notified that property is in an area of special flood hazard; and
- (h) To insure that those who occupy the areas of special flood hazard assume responsibility for their actions. (§ 2, Ord. 1010, eff. October 28, 1999)

9-14.104 Methods of reducing flood losses.

In order to accomplish its purposes, this title includes methods and provisions for:

- (a) Restricting or prohibiting uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
- (b) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

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(c) Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters;

(d) Controlling filling, grading, dredging and other development which may increase flood damage; and

(e) Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas. (§ 2, Ord. 1010, eff. October 28, 1999)

Article 2. Definitions

9-14.201 Definitions.

Unless specifically defined in this section, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this its most reasonable application.

"Appeal" means a request for a review of the Floodplain Administrator's interpretation of any provision of this title or a request for a variance.

"Area of shallow flooding" means a designated AO, zone on the Flood Insurance Rate Map. The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and velocity flow may be evident.

"Base flood" means the flood having one percent chance of being equalled or exceeded in any given year (also called the "100-year flood").

"Basement" means any area of the building having its floor subgrade (below ground level) on all sides.

"Breakaway walls" means any type of walls, whether solid or lattice, and whether constructed of concrete, masonry, wood, metal, plastic or any other suitable building material which is not part of the structural support of the building and which is so designated as to break away under wave action without damage to the structural integrity of the building on which they are used or any buildings to which they might be carried by floodwaters. A breakaway wall shall have a safe design loading resistance of not less than ten (10) and no more than twenty (20) pounds per square foot. Use of breakaway walls must be certified by a registered engineer or architect and shall meet the following conditions:

(1) Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and

(2) The elevated portion of the building shall not incur any structural damage due to the effects of wind and water loads acting simultaneously in the event of the base flood.

"Development" means any man-made change or improvement or unimproved real estate including, but not limited to, buildings or other structures, mining, filling, grading, paving, excavation, drilling or dredging operations.

"Development permit" means and includes, but is not limited to, the following: building permit, use permit, grading permit and watercourse permit.

"Flood" or "flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from:

(a) The overflow of flood waters;

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(b) The unusual and rapid accumulation of runoff of surface waters from any source; and/or

(c) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as a flash flood, or by some similarly unusual and unforeseeable event which results in flooding as defined in this definition.

"Flood Boundary and Floodway Map" means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of flood hazard and the floodway.

"Flood Insurance Rate Map (FIRM)" means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

"Flood Insurance Study" means the official report provided by the Federal Emergency Management Agency that includes flood profiles, the Flood Insurance Rate Map (FIRM), the Flood Boundary Floodway Map, and the water surface elevation of the base flood.

"Floodplain or flood-prone area" means any land area susceptible to being inundated by water from any source (see definition of "flooding").

"Floodplain management" means the operation of an overall program of corrective and preventative measures for reducing flood damage including, but not limited to, emergency preparedness plans, flood control works and floodplain management regulations.

"Floodplain management regulations" means zoning ordinances, special purpose ordinances (such as floodplain ordinance, grading ordinance and erosion control ordinance) and other applications of police power. The term describes such state or local regulations in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

"Floodproofing" means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

"Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. Also referred to as "regulatory floodway".

"Functionally dependent use" means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

"Highest adjacent grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

"Lowest floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this chapter.

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"Manufactured home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term "manufactured home" also includes park trailers, travel trailers and other similar vehicles placed on a site for greater than 180 consecutive days.

"Manufactured home park or subdivision" means a parcel (or contiguous parcels) of land divided into two (2) or more manufactured home lots for sale or rent.

"Mean sea level" means for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's flood Insurance Rate Map are referenced.

"New construction" means, for floodplain management purposes, structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by this Town.

"One hundred year flood" or "100-year flood" means a flood which has a one percent annual probability of being equaled or exceeded. It is identical to the "base flood," which will be the term used throughout this title.

"Person" means an individual or his agent, firm, partnership, association or corporation, or agent of the aforementioned groups, or this state or its agencies or political subdivisions.

"Remedy a violation" means to bring the structure or other development into compliance with State or local floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of this title or otherwise deterring future similar violations, or reducing Federal financial exposure with regard to the structure or other development.

"Riverine" means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

"Special flood hazard area (SFHA)" means an area having special flood or flood-related erosion hazards, and shown on an FHBM or FIRM as Zone AO or A1-30.

"Start of construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement was within 180 days of the permit date. The "actual start" means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings; such as garages or sheds not occupied as dwelling units or not part of the main structure.

"Structure" means a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

"Substantial improvement" means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty percent of the market value of the structure either:

(a) Before the improvement or repair is started; or

(b) If the structure has been damaged, and is being restored, before the damage occurred.

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For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either:

(a) Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions; or

(b) Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

"Variance" means a grant of relief from the requirements of this title which permits construction in a manner that would otherwise be prohibited by this title.

"Violation" means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this title is presumed to be in violation until such time as that documentation is provided. (§ 2, Ord. 1010, eff. October 28, 1999)

Article 3. General Provisions

9-14.301 Lands to which this title applies.

This title shall apply to all areas of special flood hazards within the jurisdiction of the Town. (§ 2, Ord. 1010, eff. October 28, 1999)

9-14.302 Basis for establishing the areas of special flood hazard.

The area of special flood hazard identified by the Federal Insurance Administration, through the Federal Emergency Management Agency in a scientific and engineering report entitled "The Flood Insurance study for the City of San Anselmo, California dated February 1977, with an accompanying Flood Insurance Rate Map is adopted by reference and declared to be a part of this chapter. The Flood Insurance Study is on file at the Department of Public Works. This Flood Insurance Study is the minimum area of applicability of this chapter and may be supplemented by studies for other areas which allow implementation of this title and which are recommended to the Town by the Floodplain Administrator. (§ 2, Ord. 1010, eff. October 28, 1999)

9-14.303 Compliance.

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this chapter and other applicable regulations. Violations of the provisions of this chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor or an infraction. Nothing herein shall prevent the Town from taking such lawful action as is necessary to prevent or remedy any violation. (§ 2, Ord. 1010, eff. October 28, 1999)

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9-14.304 Abrogation and greater restrictions.

This title is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this title and/or other ordinance, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail. (§ 2, Ord. 1010, eff. October 28, 1999)

9-14.305 Interpretation.

In the interpretation and application of this title, all provisions shall be:

- (a) Considered as minimum requirements;
- (b) Liberally construed in favor of the governing body; and
- (c) Deemed neither to limit nor repeal any other powers granted under state statutes. (§ 2, Ord. 1010, eff. October 28, 1999)

9-14.306 Warning and disclaimer of liability.

The degree of flood protection required by this title is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the Town, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result reliant on this chapter or any administrative decision lawfully made thereunder. (§ 2, Ord. 1010, eff. October 28, 1999)

9-14.307 Severability.

This chapter and the various parts thereof are hereby declared to be severable. Should any section of this chapter be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the chapter as a whole, or any portion thereof other than the section so declared to be unconstitutional or invalid. (§ 2, Ord. 1010, eff. October 28, 1999)

Article 4. Administration

9-14.401 Establishment of development permit.

A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 9-14.302. Application for a development permit shall be made on forms furnished by the Town and may include, but not be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions and elevation of the area in question; existing and proposed structures, access to site, fill, storage of materials, drainage facilities; and the location of the foregoing. Specifically, the following information is required:

- (a) Proposed elevation in relation to mean sea level, of the lowest floor (including basement) of all structures; in Zone AO, elevation of the highest adjacent grade and proposed elevation of lowest floor of all structures;
- (b) Proposed elevation in relation to mean sea level to which any structure will be floodproofed;
- (c) All appropriate certifications listed in Section 9-14.403 (d) of this chapter; and

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(d) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development. (§ 2, Ord. 1010, eff. October 28, 1999)

9-14.402 Designation of the Floodplain Administrator.

The Director of Public Works is hereby appointed to administer and implement this title by granting or denying development permits in accordance with its provisions. (§ 2, Ord. 1010, eff. October 28, 1999)

9-14.403 Duties and responsibilities of the Floodplain Administrator.

The duties and responsibilities of the Floodplain Administrator shall include, but not be limited to:

(a) Permit review.

(1) Review all development permits to determine that the permit requirements of this chapter have been satisfied,

(2) All other required state and federal permits have been obtained,

(3) The site is reasonably safe from flooding,

(4) The proposed development does not adversely affect the carrying capacity of areas where base flood elevations have been determined, but a floodway has not been designated. For purposes of this chapter, "adversely affects" means that the cumulative effect of the proposed development when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood more than one foot at any point;

(b) Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with Section 9-14.302, the Floodplain Administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State, or other source, in order to administrate Article 5 of Chapter 14 of this title. Any such information shall be submitted to the Town for adoption;

(c) Whenever a watercourse is to be altered or relocated:

(1) Notify adjacent communities and the California Department of Water Resources prior to such alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration,

(2) Require that the flood carrying capacity of the altered or relocated portion of said watercourse is maintained;

(d) Obtain and maintain for public inspection and make available as needed:

(1) The certification required in Section 9-14.501 (c)(1) (floor elevations),

(2) The certification required in Section 9-14.501 (c)(2) (elevations in areas of shallow flooding),

(3) The certification required in Section 9-14.501 (c)(3)(iii) (elevation of floodproofing of non-residential structures),

(4) The certification required in Section 9-14.501 (c)(4)(i) or (ii) (wet floodproofing standard),

(5) The certified elevation required in Section 9-14.503 (b) (subdivision standards), and

(6) The certification required in Section 9-14.505 (a) (floodway encroachments);

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(e) Make interpretations where needed, as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Article 6 of Chapter 14 of this title;

(f) Take action to remedy violations of this chapter as specified in Section 9-14.303. (§ 2, Ord. 1010, eff. October 28, 1999)

Article 5. Provisions for Flood Hazard Reduction

9-14.501 Standards of construction.

In all areas of special flood hazards the following standards are required:

(a) Anchoring.

(1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

(2) All manufactured homes shall meet the anchoring standards of Section 9-14.504.

(b) Construction materials and methods.

(1) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

(2) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

(3) All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(4) Require within Zone AO, adequate drainage paths around structures on slopes to guide flood waters around and away from proposed structures.

(c) Elevation and floodproofing.

(1) New construction and substantial improvement of any structure shall have the lowest floor, including basement, elevated to or above the base flood elevation plus predicted thirty (30) years' settlement. Nonresidential structures may meet the standards in subsection (c)(3) of this section. Upon the completion of the structure, the elevation of the lowest floor including basement shall be certified by a registered professional engineer or surveyor, or verified by the Town Building Official to be properly elevated. Such certification or verification shall be provided to the Floodplain Administrator.

(2) New construction and substantial improvement of any structure in Zone AO shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM, or at least two (2') feet if no depth number is specified. Nonresidential structures may meet the standards in subsection (c)(3) of this section. Upon the completion of the structure, the elevation of the lowest floor including basement shall be certified by a registered professional engineer or surveyor, or verified by the Town Building Official to be properly elevated. Such certification or verification shall be provided to the Floodplain Administrator.

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(3) Nonresidential construction shall either be elevated in conformance with subsection (c)(1) or (2) of this section or together with attendant utility and sanitary facilities.

(i) Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;

(ii) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

(iii) Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the Floodplain Administrator.

(4) Require, for all new construction and substantial improvements, that fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatics flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:

(i) Either a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of floodwaters; or

(ii) Be certified to comply with a local floodproofing standard approved by the Federal Insurance Administration.

(5) Manufactured homes shall also meet the standards in Section 9-14.504. (§ 2, Ord. 1010, eff. October 28, 1999)

9-14.502 Standards for utilities.

(a) All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from systems into flood waters.

(b) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding. (§ 2, Ord. 1010, eff. October 28, 1999)

9-14.503 Standards for subdivisions.

(a) All preliminary subdivision proposals shall identify the flood hazard area and the elevation of the base flood.

(b) All final subdivision plans will provide the elevation of proposed structure(s) and pads. If the site is filled above the base flood, the final pad elevation shall be certified by a registered professional engineer or surveyor and provided to the Floodplain Administrator.

(c) All subdivision proposals shall be consistent with the need to minimize flood damage.

(d) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

(e) All subdivisions shall provide adequate drainage to reduce exposure to flood hazards. (§ 2, Ord. 1010, eff. October 28, 1999)

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

9-14.504 Standards for manufactured homes.

All new and replacement manufactured homes and additions to manufactured homes shall:

- (a) Be elevated so that the lowest floor is at or above the base flood elevation; and
- (b) Be securely anchored to a permanent foundation system to resist flotation, collapse or lateral movement. (§ 2, Ord. 1010, eff. October 28, 1999)

9-14.505 Floodways.

Located within areas of special flood hazard established in Section 9-14.302 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply.

- (a) Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- (b) If subsection (a) of this section is satisfied, all new construction and substantial improvements shall comply with all other applicable flood hazard reduction provisions of Article 5 of Chapter 14 of this title. (§ 2, Ord. 1010, eff. October 28, 1999)

Article 6. Variance Procedure

9-14.601 Appeal Board.

- (a) The Town Council shall hear and decide appeals and requests for variances from the requirements of this chapter.
- (b) The Town Council shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the Floodplain Administrator of this chapter.
- (c) In passing upon such applications, the Town Council shall consider all technical evaluations, all relevant factors, standards, etc., specified in other sections of this chapter; and
 - (1) The danger that materials may be swept onto other lands to the injury of others;
 - (2) The danger to life and property due to flooding or erosion damage;
 - (3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - (4) The importance of the services provided by the proposed facility to the community;
 - (5) The necessity to the facility of a waterfront location, where applicable;
 - (6) The availability of alternative locations, for the proposed uses that are not subject to flooding or erosion damage;

TOWN OF SAN ANSELMO
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- (7) The compatibility of the proposed use with existing and anticipated development;
 - (8) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 - (9) The safety of the access to the property in times of flood for ordinary and emergency vehicles;
 - (10) The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site;
 - (11) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities, such as sewer, gas, electrical and water system, and streets and bridges.
- (d) Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items (1) through (11) of subsection (c) of this section have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
- (e) Upon consideration of the factors of subsection (c) of this section and the purpose of this chapter, the Town Council may attach such conditions to the granting of variances as it deems necessary to further the purpose of this chapter.
- (f) The Floodplain Administrator shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request. (§ 2, Ord. 1010, eff. October 28, 1999)

9-14.602 Conditions for variances.

- (a) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places without regard to the procedures set forth in the remainder of this section.
- (b) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (c) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard to afford relief.
- (d) Variances shall only be issued upon:
 - (1) A showing of good and sufficient cause;
 - (2) A determination that failure to grant the variance would result in exceptional hardship to the applicant;
 - (3) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization to the public, or conflict with existing local laws or ordinances.
- (e) Variances may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that the provisions of subsections (a) through (d) of this section are satisfied and that the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

TOWN OF SAN ANSELMO
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(f) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the regulatory flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation. A copy of the notice shall be recorded by the Town Council in the office of the Marin County Recorder and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land. (§ 2, Ord. 1010, eff. October 28, 1999)

Part 2 - Public Outreach

Flood Mitigation Planning

The Town of San Anselmo's Flood Mitigation Plan is an extension of the Town of San Anselmo's Disaster Mitigation Plan. In 2006 The Town of San Anselmo applied for and received a Flood Mitigation Grant to develop a flood mitigation plan. The Town formed a Flood Committee and they held their first meeting on February 27, 2006. The Town also hired a contractor to prepare the Flood Mitigation Plan.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Agendas and Meetings

From: "Lise Stampfli Torme" <lstampfli@earthlink.net>
To: "Kristin Nokomis Scott Heath" <hogbarf@ix.netcom.com>; "Carolyn Nokomis Smith" <bandaasmom@comcast.net>; "Jo Ann Nokomis Sollecito" <rebelalrtist4@aolcom>; "Ja Spears" <jspears44@comcast.net>; "Martha Nokomis Spears" <mspears24@comcast.net>; "Lise Stampfli Torme" <lstampfli@earthlink.net>; "Debbie Stutsman" <dstutsman@ci.san-anselmo.ca.us>; "Dick Stutsman" <rdstutsman@msm.com>; "Barbara Thornton" <bthornton9000@yahoo.com>; "Tom Tunny" <ttunny@allenmatkins.com>; "Helen Nokon" <hvan@jps.net>; "Vandongen" <TVandongen@mmofo.com>
Sent: Monday, February 27, 2006 2:39 PM
Subject: Citizen Flood Meeting Minutes—Draft

DRAFT:

February 23 Meeting minutes of the Ross Valley Homeowners who were flooded.

1. Lise Stampfli (Morningside neighborhood) began the meeting by making several announcements.

- Catholic Charities will meet the following Thursday in the Molinari Room of St Anselm to meet with any flood victims who need assistance (money, food, shelter, clothing etc.) dinner will be served following a 5:00 pm mass.

- The Town of San Anselmo's Flood Committee will meet the following Monday March 2 in the evening. (place to be established at a later date.)

- The Town is presently working with Nokomis area homeowners to help them apply for and receive FEMA grants to raise their homes. The Town administrator Debbie Stutsman wanted the group to know that FEMA representatives could meet with other neighborhoods to explore this process.

It was noted that the meeting was put together very quickly and the success of the group going forward will hinge on getting the support from everyone in each neighborhood that was flooded.

2. Dick Stutsman of the SA Flood Committee was introduced.

He is the husband of Debbie Stutsman who is the Town Administrator for San Anselmo he is an engineer with experience at PG&E. Dick commented that the Town of S.A. has chosen 5 volunteer engineers, from a pool of 12 applicants, to study the flood situation in S.A. and Ross Valley. He commented on the formation, composition and skill set of the newly appointed Flood Committee. It consists of 1 structural and 4 practicing hydrological engineers. The committee's charge is to study and analyze existing conditions and make findings and recommendations and produce a short, mid and long-term mitigation plan for flooding.

He stated that one problem facing the Committee is getting accurate data for the study. It was suggested that perhaps Bill Martin of KTVU who lives in S.A. might have some reliable information. Dick acknowledged that many studies have been done in the past but a solution has never been implemented due to the varied interests within the Valley.

It was pointed out that even with the knowledge that San Anselmo is prone to flood, that the Town and Contra Costa County have done very little to monitor and control development in the Valley that results in large volumes of water being drained from the hillsides into the various creeks, streets and drains which flow into the Corte Madera creek.

Dick solicited information from the homeowners present and took copious notes re. water levels.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

rates, known areas of poor or badly maintained infrastructure. Stutsman also asked the attendees if they could help with this type of data gathering. He noted that records of historical flows and water levels were hard to come by. Some data was poor or inadequate. The group decided to write flood histories from a neighborhood perspective. Older residents will be interviewed so that a more complete picture of RV flooding can emerge. This should include items such as which drains back up during heavy downpours, small creeks that overflow their banks, and especially what happened on the morning of December 31, 2006 in their neighborhoods. These documents will be used to further make our case and be presented to the town and county public officials and teams working to study the flooding problems. In as much detail as possible, these descriptions should include simple hand drawn maps to help pin point problem areas. Peak flow in and drainage times along with water heights will be valuable information. Histories will be assembled in an e-mail stream. Histories should be e-mailed to Lise: lstampfli@earthlink.net. Be sure to put the words "Flood History" into the subject field of your e-mail form.

4. A Draft Mission Statement and Vision statement were presented. Edits were made and the following was approved as an initial effort.

Mission:

To advocate for the protection of the people, homes, property and wildlife of the Ross Valley watershed from flood.

Vision Statement

- Ensure that the residents of the Ross Valley Watershed are protected from the effects of flood events by working for the creation of effective flood control systems and infrastructure.
- Ensure that local, regional, state, and federal agencies take positive and proactive steps to mitigate the dangers of flash and tidal flood events.
- Inform agencies in matters relating to hazardous conditions that may contribute to flooding.
- Educate segments of the population re flood dangers, safety precautions and mitigation's
- Ensure improved and effective warning measures and rapid emergency response in the event of a flood.
- Support immediate actions to mitigate hazardous conditions caused by poor maintenance, and neglect. (clean up actions, etc.)

5. Attendees from San Anselmo, Kent, Ross introduced themselves and briefly shared their flooding experiences. Many commented on how very fortunate it was that no one lost their lives in the event. While some pets perished, for humans there were many close calls. The group agreed that if something is not done soon to remedy the hazardous conditions of the creek and drainage systems, the next flood could be deadly.

Attendees from Ross expressed anger and frustration with their elected representatives response to the flood. "An act of God" was how their council termed the event. Kent residents felt that the warning systems had failed and emergency response was poor or nonexistent. Many SA residents stated that they could not hear the warning blasts. Survivors of the '82 flood mentioned that the bullhorn warning from moving patrol cars was more effective during that event than the blast issued from the Town's Center.

It was suggested that the group share information about suspect contractors (price gouging), service

2/27/2006

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

providers, and government agencies to determine if the information is consistent and correct. It was noted that this was not the primary purpose of the group, but would have tremendous value when the next flood hits.

Everyone was asked to go back to their neighborhoods to generate further interest in the group's efforts and to increase the turn-out for the next meeting. Nina Cartee volunteered to work with Lise on a mailing list and meeting announcement. SA's Town Administrator said she would help secure a list of the flood affected from the County. (we are waiting for this list)

7. Thom Cooper stated that he was willing to research the legal issues surrounding the town and county efforts to mitigate flooding that have not been acted upon over the past 10-20 years. He felt there may be some action we could take to help us further our cause.

8. It was also brought to the attention of the group that on the morning of December 31, 2006 that a flood channel had not been opened or properly managed which may have caused flooding in some areas. Attempts were to be made by all to try and find out more about this event.

9 Gayle Permar, an architect in attendance, identified several handbooks of technical specs that homeowners could review when considering making changes to their homes. The group will look into this at a future meeting as time and committee work allow. US Govt. Publication: [Taking in Where You Live](#).

10. Finally, the group identified a number of meetings that will soon take place which should be attended by members of our group. Individuals who attend will take notes and report back at our next meeting.

February 27, 2006 at 7:00; Town of San Anselmo meeting (Lise will report to the group via e-mail the place and time)

Our next meeting will be March 7th Tuesday time and place to be confirmed.

Assemblyman Joe Nation - schedule of "Pancake Breakfast Events"

Saturday, March 11, 2006

8:30 – 10:30 a.m.

West Marin School Community Gym

11550 Highway 1, Pt. Reyes Station

Saturday, March 18, 2006

8:30 – 10:30 a.m.

San Rafael High School Cafeteria

185 Mission Avenue, San Rafael

<http://democrats.assembly.ca.gov/members/a06/events.htm>

Friends of Corte Madera Creek

Board meeting open to the public: **March 16 Monthly Board Meeting**, Thursday, 7:00 p.m., Changed Location: Bacich Elementary School, 25 McAllister Avenue, Kentfield. Meet in the new library.

<http://www.friendsofcortemaderacreek.org/index.html>

2/27/2006

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Barbara Thornton
Mayor

Wayne Cooper
Vice Mayor



525 San Anselmo Avenue, San Anselmo, CA 94960-2682
www.townofsananselmo.org

Peter Breen
Councilmember

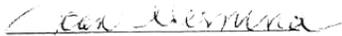
Ted Freeman
Councilmember

Ian Roth
Councilmember

**FLOOD MITIGATION WORKING GROUP
MEETING
Monday, February 27, 2006
7:00 p.m.
Ross Valley School District Board Room
110 Shaw Drive, SA**

1. **Call meeting to order.**
2. **Presentation by Jack Curley, County Engineer, on flood control efforts**
3. **Discussion of future work plan items**
4. **Committee requests for future agenda items, questions and comments to staff, staff miscellaneous items**
5. **Open time for public expression.**
6. **Next meeting date.**
7. **Adjourn.**

I certify that the above agenda was posted on the Public Notice Bulletin Board on Friday, February 24, 2006.


Joan Vermond, ASA I

Administration/Finance: 415-258-4600 - FAX 415-459-2477 - email: adm-finance@ci.san-anselmo.ca.us
Planning/Public Works/Building: 415-258-4616 - FAX 415-454-4683
emails: planning@ci.san-anselmo.ca.us - publicworks@ci.san-anselmo.ca.us

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

**Town of San Anselmo
Flood Advisory Committee**

MEETING MINUTES

PROJECT: Town of San Anselmo
Flood Advisory Committee Meeting

DATE: April 24, 2006

SUBJECT: Progress Meeting #6
Committee Task Planning

ATTENDEES: Name

Wayne Cooper
Reinhard Ludke
Nicholas M. Johnson
Glenn Dearth
Patrick Ritter
Richard Stutsman

Discussed

By: _____ Brief: _____

David G. Dickson, MIG, Inc 707-479-8491

Ross Valley Flood Prevention Project

Marin County Task Force

Project Manager

A County Program/Project has commenced to study and develop strategy to reduce flood risk and damage for the Ross Valley Watershed.

Previous similar projects:

Truckee Meadows - Truckee River Watershed

Pajaro River - San Jose - Monterey

Key Demonstration Projects

Colorado Springs, Tulsa - Oklahoma, King County - Washington

Reinhard Ludke Secretary

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TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

MEETING MINUTES

PROJECT: Town of San Anselmo
Flood Advisory Committee Meeting [FAC]

DATE: May 22, 2006

SUBJECT: Progress Meeting #8
Review Ross Valley Flood Protection And Environmental Enhancement Project
Community Workshop Saturday May 20, 2006

ATTENDEES: Name

Peter Breen
Nicholas M. Johnson
Patrick Ritter
Richard Stutsman
Reinhard Ludke

Discussed

By: _____

Brief: _____

BOB LEWIS REPORT

Neighborhood Flood Mitigation Group

2 attorneys made presentation regarding "responsibility of damage done by flood"

Larry Mann

Ray Bourhris – (Kentfield)

Neighborhood group has performed a local creek walk

Indicated that some damage repair costs are eligible for NRCS (National Resource Conservation ???) funding, but this federal program funds are depleted.

requested that FAC would like to receive copies of any written records or observations that are made by the Community Flood Committee

Reinhard Ludke Secretary

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

**Ross Valley Watershed
 Flood Protection & Environmental Enhancement**

**Town of San Anselmo
 Creek Walk Form**

**Creek Channel Inspection
 Field Notes Form**

Block(s) _____ Parcel(s) _____
 Address(s) _____

<p>LOCATION DESCRIPTION</p> <p>Creek: Name: _____</p> <p>Location Begin Creek Station _____</p> <p>End Creek Station _____</p>	<p>OVERALL RATING</p> <p><input type="checkbox"/> Major Problem</p> <p><input type="checkbox"/> Modify Creek Channel -obstruction</p> <p><input type="checkbox"/> Remove Vegetation</p> <p><input type="checkbox"/> Debris Removal</p> <p>INSPECTOR(S) TEAM</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>PRIMARY OCCUPANCY OR USE OF ADJACENT PROPERTIES</p> <p><input type="checkbox"/> residential <input type="checkbox"/> commercial <input type="checkbox"/> office <input type="checkbox"/> school</p> <p><input type="checkbox"/> government <input type="checkbox"/> other _____</p>	<p>INSPECTION DATE</p> <p>_____ day/month/year</p> <p>Time _____ AM/PM</p>
<p>DEBRIS</p> <p>_____</p>	
<p>OBSTRUCTION / CONSTRICTION / STRUCTURES</p> <p>_____</p>	
<p>VEGETATION – TREE, BUSHES, VINES</p> <p>_____</p>	

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

**Town of San Anselmo
Flood Advisory Committee**

CREEK WALK

Creek walk(s) are scheduled for July 15, 2006 and July 22, 2006

Committee agreed that a protocol for the creek walk needs to be developed before performing the field work

Committee intends to coordinate/report the Town of San Anselmo creek walk schedule, objectives, process & procedures with the County. We will copy our plan(s) and coordinate with:

Jack Curley	Civil Engineer	County Flood Control
Liz Lewis	County MCSTOPP Program Coordinator, Creek Naturalist	
Matt Smeltzer	Civil Engineers	Geomorphologists

Creek Walk Objectives

Patrick Ritter and committee discussed and recorded creek walk objectives – see attached list

SCHEDULE

- Prepare maps, creek walk procedures, forms and training protocol before June practice creek walk
- The practice walk is scheduled for Saturday June 10 10:00 AM meet at Nokomis Bridge
- Practice creek walk zone - Nokomis Bridge to Sir Francis Drake Bridge

NEXT MEETING DATE:

Monday June 12, 2006

Monday June 26, 2006

Monday July 10, 2006

ACTION:

Creek walk procedure, protocol, and forms prepared before practice walk

Train creek walk leaders before July Creek Walks

County map requested for June walk – Nokomis Bridge – Sir Francis Drake Bridge before June 9

County maps for Town of San Anselmo – before July 14, 2006

Reinhard Ludke Secretary

MEETING MINUTES 060522

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

**Ross Valley Watershed
Flood Protection & Environmental Enhancement**

Town of San Anselmo

**Creek Channel Inspection
Field Assessment**

**May 22, 2006 meeting
(Patrick Ritter)**

Objectives:

The Town of San Anselmo Flood Advisory Committee developed Short Term, Intermediate Term, and Long Term Action Plans that include a reconnaissance of the San Anselmo Creek and major tributary creeks and storm drainage structures to identify conditions that may reduce the capacity of the creek to handle peak storm water flows. The Flood Advisory Committee will schedule and perform creeks walks in June and July 2006, to record observations and locations of debris, vegetation, fences & barriers, structures (buildings, bridges, culverts), and other issues that impact creek capacity. The field inspection data will be used by the Town to make recommendations for short term creek flow improvements and long term creek improvements. The recorded data will be included in the County watershed hydraulic models.

Field survey objectives include:

- Fact Finding – causes of flooding, choke points, restrictions, structures and trees, debris collection/damming potential
- Gather input information to be included in County hydraulic model – make sure they don't miss specific San Anselmo issues
- Identify constraints/issues for short/intermediate/long term measures
- Verify that the list of intermediate/short/long term measures is complete and accurate
- Identify debris removal, vegetation/tree removal, short term measures / capacity constraints recommendations
- Use a field recording form that is easy to use, is comprehensive and can be tied back into Short Term Action Plan and long term measures, and for hydraulic models
- Get maps with creek stations and coordinates – use GPS data on field records to record specific areas of concern – be able to go back later to identified "location" and take recommended measures – and/or include the data in the "Hydraulic Watershed Model".

Request county to furnish maps for Town of San Anselmo Creek Walk that include:

1. continue COE Corte Madera Creek station upstream San Anselmo Creek to Fairfax Boundary
2. provide "preliminary" Sleepy Hollow Creek stations use start station 0 + 0.00 at intersection with San Anselmo Creek and go upstream
3. show light screen aerial background under parcel map
4. plot furnish field maps to scale suggests scale 1" = 100'

:

Reinhard Ludke Secretary

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

**Ross Valley Watershed
Flood Protection & Environmental Enhancement**

Town of San Anselmo

-
- Identify location – record locations – property address and creek location stations –
 - GPS – record GPS coordinates of location(s) of observations – the GPS data can be used to accurately put field observation data into the watershed computer model and database.
 - Describe observations:

Debris – loose natural or man made debris in the creek restricts flow and will be transported downstream and can collect at restrictions and dam up the creek – reduce flow capacity and contribute to early flooding. Identify type and location of debris and indicate if this debris could/should be removed as part of the 2006 Creek Flood Control Maintenance action plan.

Obstruction, constriction, structures – there are some fixed structures, bridge piers, small culvert openings, fences, or reductions in channel section – that reduce flow capacity of the creek or present locations where debris can jam or collect and restrict flow. Record these conditions – take measurements and record data as much as possible – include sketches and photos description

Vegetation – there are trees, bushes, vines and other plants that have grown into the creek and clog the creek, reduce flow and provide the environment where debris is trapped and restricts storm water flows. Identify the type, size and location of this condition. Take photographs. Record if this material should be trimmed/removed as part of 2006 Creek Flood Control Maintenance action plan.

Flood Mitigation Working Group

Meeting Notes of June 12, 2006

Members Present: Council Member, Peter Breen, Wayne Cooper, Glenn Dearth, Nicholas Johnson, Richard Stutsman.

Members Absent: Reinhard Ludke

1. **Call to Order:** The meeting was called to order at 7:00 p.m.
2. **Report on meeting of the Ross Valley Flood Mitigation League:** Bob Lewis reported that there was a hodge podge of items discussed. The major issues were the tagging of maximum water surface elevations for the 2005 flood. The League has had tags made up and their committee will be canvassing the neighborhoods, identifying water levels and attaching the tags.
3. **Report on meeting of the Ross Valley Watershed Technical Working Group Meeting:** Stutsman reported that the County will be beginning surveying San Anselmo Creek in the next few weeks for input data into the hydraulic computer model. There are insufficient moneys available right now for a complete survey; i.e. complete length and area above the creek banks.
4. **Report on meeting of the Ross Valley Financial Working Group Meeting:** Debbie Stutsman reported that a public opinion poll will be conducted in the Ross Valley to assess voter support for a benefit assessment district to fund watershed improvements, with the idea of going forward with a measure in the spring.
5. **Pre-Creek Walk Discussion:** Each of the committee members was asked to summarize what they expected to see resolved as a result of debris removal in the creek. The general consensus was that even if the all the debris and vegetation were removed from the creek and creek restrictions were removed, the flooding problems would not be resolved. Only frequency of flooding and height of flooding would be reduced.

Stutsman agreed to revise Reinhard's draft Creek Inspection form for use on restriction inspection issues, and also increase line space on the previously submitted creek walk inspection form.

6. **Committee requests for future agenda items, questions and comments to staff, staff miscellaneous items:** Main item for the next meeting is the Creek Walk data to be prepared by Richard Stutsman.
7. **Committee request for future agenda items, questions and comments:** Only creek walk on next agenda.
8. **Open time for public expression:** No one spoke during this time.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

From: "Kathleen Aswell" <kmsa@infostations.com>
To: "Debbie Stutsman" <dstutsman@ci.san-anselmo.ca.us>
Sent: Wednesday, June 14, 2006 8:28 AM
Attach: flood response.doc
Subject: Follow up to Flood Meeting

Debbie,

I just wanted to follow up on Monday night's Flood meeting. I didn't mean to open a "can of worms," but communication is my field and I want to help out when and if I can. The problem with communication is that unless you put it in front of someone, they just don't find it. Posting information on web sites and on bulletin boards is great, but people don't look at websites or walk up to a bulletin board - they tend to listen to "trust advisors (e.g., the clerk in the shop who says "nothing is being done"). I've written crisis communication plans and response documents for both the Federal Reserve System and other companies so this is coming from my own knowledge of how the general public communicates when they don't have an "official message."

Since the Town's flood response is so loaded for many residents and merchants, I'd like to offer the following suggestions for your flood-related communications.

- Develop a specific bulletin about the Town's response (see attached for an example). Obviously, this is not a document with a lot of detail, but the reader gets the message that work is being done. This will set the record straight for some of the naysayers.
- Post the information in your normal places, but add some new ones:
 - Send it out through the San Anselmo Chamber distribution
 - Provide some for the "friendly merchants" for them to put near the cash register or enough to put in a bag at purchase
 - Have the Explorers drop by the merchants who have been critical of the response with copies
 - Have some of the bulletins at the Town table at the Art and Design festival (or ask Connie if you have space at the Chamber table. if you don't have a table for the Town)

In addition, I would suggest that you advertise the Flood Group's meetings in either the IJ or RV Reporter (or both). People may not come, but if they see a notice about the meeting, they will have the impression that something is being done.

Debbie, I hope these suggestions help. If you want to talk about tactics or if I can help in any way, please let me know.

Kathleen

Kathleen Aswell, Ph.D.
Creative Solutions
Strategic Marketing and Corporate Communications
(415) 454-8405
kmsa@infostations.com

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Town of San Anselmo
Flood Advisory Committee

MEETING MINUTES

PROJECT: Town of San Anselmo
Flood Advisory Committee Meeting

DATE: ~~August 14, 2006~~ 6/13/07

SUBJECT: Progress Meeting #14

ATTENDEES: Name

Peter Breen
Reinhard Ludke
Nicholas M. Johnson
Glenn Dearth
Richard Stutsman

Discussed

By:

Brief:

2. Ross Valley Flood Mitigation League

No Report.

3. Ross Valley Technical Working Group Meeting

Next meeting schedule for 12/18/06

Preliminary results of watershed hydraulic model

4. Ross Valley Watershed Financial Working Group

Debra Stutsman reported

A storm drainage users fee survey will be distributed in Ross Valley Town to get the
“temperature” of support for an assessment to mitigate flood risk.

Reinhard Ludke Secretary

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TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



Barbara Thornton
Mayor

Wayne Cooper
Vice Mayor

Peter Breen
Councilmember

Ted Freeman
Councilmember

Ian Roth
Councilmember

525 San Anselmo Avenue, San Anselmo, CA 94960-2682
www.townofsananselmo.org

next agenda
Letter of support
NOI

**FLOOD MITIGATION WORKING GROUP
MEETING**

**Monday, July 10, 2006
8:00 p.m.**

**San Anselmo Library
110 Tunstead Avenue**

*****NOTE LOCATION AND TIME CHANGE*****

1. Call meeting to order.
2. Report on meeting of the Ross Valley Flood Mitigation League.
3. Report on Ross Valley Watershed Technical Working Group meeting.
- ④ 4. Report on Ross Valley Watershed Financial Working Group meeting.
5. Report on Friends of Corte Madera Creek bank stabilization project at Creek Park.
6. Creek Walk Discussion – Creek walk scheduled for Saturday, July 15 and Saturday, July 22.
7. Committee requests for future agenda items, questions and comments to staff, staff miscellaneous items
8. Open time for public expression.
9. Next meeting date.
10. Adjourn.

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. 25% NOI
. Jan Proj
. NOI due ?
. early warn
. Home elev
. 600-0367
CA-720
11/11
8/2/06

I certify that the above agenda was posted on the Public Notice Bulletin Board on Friday, July 7, 2006.

Joan Vermond, ASA I

Administration/Finance: 415-258-4600 - FAX 415-459-2477 - email: adm-finance@ci.san-anselmo.ca.us
Planning/Public Works/Building: 415-258-4616 - FAX 415-454-4683
emails: planning@ci.san-anselmo.ca.us - publicworks@ci.san-anselmo.ca.us

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

**FLOOD MITIGATION WORKING GROUP
MEETING**

Monday, July 31, 2006

7:00 p.m.

**Ross Valley School District Board Room
110 Shaw Drive, San Anselmo**

- 1. Call meeting to order.**
- 2. Report on meeting of the Ross Valley Flood Mitigation League.**
- 3. Report on Ross Valley Watershed Technical Working Group meeting.**
- 4. Report on Ross Valley Watershed Financial Working Group meeting.**
- 5. Report on Friends of Corte Madera Creek bank stabilization project
Creek Park.**
- 6. Creek Walk findings:**
 - a. San Anselmo Creek**
 - b. Sleepy Hollow Creek**
- 7. Committee requests for future agenda items, questions and comment
staff, staff miscellaneous items**
- 8. Open time for public expression.**
- 9. Next meeting date.**
- 10. Adjourn.**

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Revisit Plan
Emerg. Prep. Info.
9.28.06

**FLOOD MITIGATION WORKING GROUP
MEETING**

Thursday, August 24, 2006
7:00 p.m.

San Anselmo Library,
110 Tunstead Avenue, San Anselmo

1. Call meeting to order.
2. Report on meeting of the Ross Valley Flood Mitigation League.
3. Report on Ross Valley Watershed Technical Working Group meeting.
4. Report on Ross Valley Watershed Financial Working Group meeting.
5. Report on Friends of Corte Madera Creek bank stabilization project at Creek Park.
6. Creek Walk findings:
 - a. San Anselmo Creek
 - b. Sleepy Hollow Creek
7. Committee requests for future agenda items, questions and comments to staff, staff miscellaneous items
8. Open time for public expression.
9. Next meeting date.
10. Adjourn.

Sorich Creek plans

MCC

Revisit plan

① Laurel St.
② Sorich Pk.

I certify that the above agenda was posted on the Public Notice Bulletin Board on Monday, August 21, 2006.

Joan Vermond, ASA I

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



Barbara Thornton
Mayor

Wayne Cooper
Vice Mayor

525 San Anselmo Avenue, San Anselmo, CA 94960-2682
www.townofsananselmo.org

Peter Breen
Councilmember

Ted Freeman
Councilmember

Ian Roth
Councilmember

8-29-06

Dear Creek Property Owner:

Beginning the second week of September, a crew from the Marin Conservation Corps (MCC) will be working in the creek to remove debris, brush, and vegetation, and mark trees for possible future removal. No trees will be removed. Future action regarding removal of trees will depend on owner consent and availability of funds.

This is a part of the regional Ross Valley Watershed effort to clean up the Creek. It is a short term action and is funded by the members of the Watershed group, including the Town of San Anselmo.

The Town Municipal Code Section 9-15.05 (a) states that "It shall be the responsibility of each property owner, occupant or tenant of any real property within the Town not to cause or allow obstruction of any watercourse(s) or portion thereof which flows upon, under, over, or across the property and to maintain and to keep the watercourse(s) clear of all earth, rocks, litter, household trash, rubbish, garbage, or debris, or brush, stumps, trees or other natural growth, or any other material or matter, whether indigenous or nonindigenous which can or may obstruct, divert, or interfere with the flow of water in the watercourse(s)."

In light of the above, it is in the interest of all Creek property owners to allow this work to be performed, all costs for which will be paid by the Ross Valley Watershed.

Please notify the Town if you do not want this work done on your property. Should you decline to participate, you may be required to do this work yourself or pay the Town's future costs to do the work.

Thank you for your cooperation.

Sincerely,

Rabi Elias
Public Works Director

Administration/Finance: 415-258-4600 - FAX 415-459-2477 - email: adm-finance@ci.san-anselmo.ca.us
Planning/Public Works/Building: 415-258-4616 - FAX 415-454-4683
emails: planning@ci.san-anselmo.ca.us - publicworks@ci.san-anselmo.ca.us

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Barbara Thornton
Mayor

Wayne Cooper
Vice Mayor



525 San Anselmo Avenue, San Anselmo, CA 94960-2682
www.townofsananselmo.org

Peter Breen
Councilmember

Ted Freeman
Councilmember

Ian Roth
Councilmember

June 28, 2006

Dear San Anselmo Resident:

SUBJECT: Creek Walk

This letter is to advise you that on Saturday, July 15 and Saturday, July 22 the Town of San Anselmo's Flood Committee, appointed by the Town Council, will conduct a creek walk in the San Anselmo and Sleepy Hollow Creeks, ~~in an area near your residence.~~

This courtesy notice is being sent to all residents whose property ^{extends into} is ~~adjacent~~ to the creek. The purpose of the Creek Walk is to view the current physical state of the creek following the recent flooding.

If you have any questions regarding the matter, please contact 258-4626.

Sincerely,

Debra Stutsman
Town Manager

Administration/Finance: 415-258-4600 - FAX 415-459-2477 - email: adm-finance@ci.san-anselmo.ca.us
Planning/Public Works/Building: 415-258-4616 - FAX 415-454-4683
emails: planning@ci.san-anselmo.ca.us - publicworks@ci.san-anselmo.ca.us

Flood Mitigation Working Group

Meeting Notes of November 15, 2006

Members Present: Council Member, Peter Breen, Wayne Cooper, Glenn Dearth, Nicholas Johnson, Richard Stutsman.

Members Absent: Council Member Reinheard Ludke, Patrick Ritter (resigned)

1. **Call to Order:** The meeting was called to order at 1900.
2. **Report on meeting of the Ross Valley Flood Mitigation League:** There were no representatives present from the league, so no minutes were presented.
3. **Report on Ross Valley Watershed Activities:**
 - a. **Report on informational community meeting held 10/21/06:** Richard Stutsman reported that the major emphasis at the committee meeting was Jack Curley's presentation on the watershed computer model that was being developed. He stated that the 1982 and 2005 rainfall data have been calibrated with the model and that the initial computer runs indicated that there was 1,800 cfs out-of-band flow into downtown San Anselmo. He stated that by January's meeting the results of model will be completed.
 - b. **Report on Technical Working Group Meeting:** Richard Stutsman stated that the meeting at MIG focused on the presentation for the Community meeting. It was a dry run of the presentation. Representatives from San Anselmo and Fairfax were asked to provide their comments on the presentation.
 - c. **Report on Financial Working Group meeting:** Debbie Stutsman stated that they are trying to determine what kind of ballot measure should be developed. They are looking at a storm drainage fee based on impermeable surfaces. It would require a 50% + 1 vote to pass it. She reported that the ballot will probable come out in March and will be in the \$100 to \$180 per household per year range. San Anselmo Town Council voted to get back into Zone 9 Flood Control District.
4. **Report on Friends of Corte Madera Creek bank stabilization project at Creek Park:** The project is complete. They left the lower rip-rap and installing burlap, Willows and Alders on the upper sections where the rip-rap was removed. It was a \$35,000 project.
5. **Report on creek vegetation removal by the Marin Conservation Corp:** The MCC spent \$60,000 cleaning portions of the creeks in Larkspur, Ross, San Anselmo, Fairfax and Sleepy Hollow. They removed over 180 cubic yards of material from the creeks. They spend over 500 hours of time in the creeks.
6. **Report on County Fair Days booth and emergency preparedness materials:** Debbie Stutsman and Barbara Thorton manned the booth and handed out flood preparedness materials. They had 1) Home Safety Emergency Plans, 2) Protecting Yourself and Your Property Against Flooding, and 3) Winter Storm Preparedness Tips.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Discussion on original Flood Committee Action Plan: Stutsman reported that he felt that the only remaining open item was "Review Flood Alarm System"; Debbie Stutsman and Peter Breen stated that they will address that. It was also unclear what item 15 was "Develop Town Creek Map" that was assigned to Ludke. He will report at the next meeting.

Committee requests for future agenda items, questions and comments to staff, staff miscellaneous items: Flood Alarm system and proposed ballot measure.

Open time for public expression: No questions were asked.

Next meeting date: Wednesday, December 13th, 2006 at 6 pm.

Adjournment: The meeting ended at 2035.

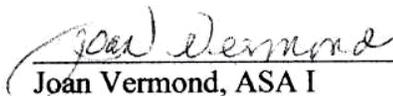
**FLOOD MITIGATION WORKING GROUP
MEETING**

Thursday, January 18, 2007 7:00 p.m.

**San Anselmo Library,
110 Tunstead Avenue, San Anselmo**

- 1. Call meeting to order.**
- 2. Report on meeting of the Ross Valley Flood Mitigation League.**
- 3. Report on Ross Valley Watershed Activities:**
 - a) Report on Technical Working Group meeting.**
 - b) Report on Financial Working Group meeting.**
- 4. Report on newly-installed Creek Monitoring Equipment and options for additional features.**
- 5. Committee requests for future agenda items, questions and comments to staff, staff miscellaneous items**
- 6. Open time for public expression.**
- 7. Next meeting date.**
- 8. Adjourn.**

I certify that the above agenda was posted on the Public Notice Bulletin Board on or before Monday, January 15, 2007.



Joan Vermond, ASA I

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

**Ross Valley Watershed
Flood Protection & Environmental Enhancement**

Town of San Anselmo

**Creek Channel Inspection
Field Assessment Objectives, Process and Procedures**

Objectives:

The Town of San Anselmo Flood Advisory Committee developed Short Term, Intermediate Term, and Long Term Actions Plans that include a reconnaissance of the San Anselmo Creek and major tributary creeks and storm drainage structures to identify conditions that may reduce the capacity of the creek to handle peak water flows. The creek walks are performed to record observations and locations of debris, vegetation, fences & barriers, structures (buildings, bridges, culverts), and other issues for creek capacity. The field inspection data will be used by the Town and County to make recommendations for short term creek flow improvements and for data to be included in the County watershed hydraulic models.

Debris and minor obstruction removal may be performed in 2006. Creek maintenance and debris removal will follow the County Flood Control Maintenance BMP Manual – Section III

The creek walk objective includes

- Fact Finding – causes of flooding, choke points, restrictions, structures and trees, debris collection/damming potential
- Gather input information to be included in County hydraulic model – make sure they don't miss specific San Anselmo issues
- Identify constraints/issues for short/intermediate/long term measures
- Identify debris removal, vegetation/tree removal, short term measures / capacity constraints recommendations

Process:

- The Advisory Committee has prepared the field inspection protocol and procedures. The committee will train team leaders on what to look for, how to record the information, and where to submit the field inspection records
- Each minimum 3 person field team will include at least one member who has been trained for the creek field walk. One team member will be the Recorder – fill out the field forms, record locations, document photograph record two other team members will make measurements and provide verbal description of observations.
- The location, field notes and measurements should be as complete and accurate as possible because this is the “final” survey for 2006 and an action plan will be developed based on this record. This survey may also serve as the input data for the County study of San Anselmo Creek.
- The field maps – prepared by County & Town - are to scale - 1 inch = 500 ft. and associated property lists address are provided to help “locate and record” field observations. You may use one or all of street address, creek stations, measurements from landmarks – (bridges), and/or GPS coordinates to record the location of the observations.
- Get maps with creek stations and coordinates – use GPS data on field records to record specific areas of concern – be able to go back later to identified “location” and take recommended measures – and/or include the data in the “Hydraulic Watershed Model”.
- Location: a accurate and clear definition of the location is very important – locates issues for Short Term and Long Term Action Plan (clear debris and obstructions from creek before 12/2006), identify problems –type, size & location - that can be included in hydraulic analysis models
- If a location requires additional future detailed survey and measurements for the hydraulic models – note this requirement on the form

Procedures:

- Notify property owners that team will be in the creek. The creek channel is private property except where it is at Town Parks or under streets and bridges.
- Equipment - creek maps, Engineers Scale (used to scale from maps and identify locations - parcel maps, measuring tapes (100 ft. & 25 ft.), digital camera, forms, pencil, pen

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

**Town of San Anselmo
Flood Advisory Committee**

February 10, 2007 is the next scheduled Community Meeting
Zone 9 Flood Control District – both Fairfield and San Anselmo passed resolutions to join the District. San Anselmo Council meeting on 12/19
Public hearing date 30 days after resolution
Then Town can adopt resolution - estimated end of February

5. Flood Committee Action Plan

Dick Stutsman described a proposed Creek Gaging Station system to be installed in San Anselmo Creek
The station would transmit data to Fire Station 19
High water reading by data monitor can trigger Flood Alarm action

Committee discussed technical performance and operations of this gage
Installation of field equipment

Location – operation – maintenance

Telemetry & communication with receiver fire station + town hall ?? to be determined

Office equipment

Software installed on computer at fire station

Equipment, software & location Fire Station 19 San Anselmo Avenue

To be documented and agreed -

Operation, High Water Records Observation, Training and Alarm Trigger Criteria

WHO HAS RESPONSIBLE CHARGE OF EMERGENCY RESPONSE AND ALARM ??

Nicholas Johnson requested that Creek Gage Data be recorded and saved along with storm rainfall data so this information record can be added to historical record and other water gage stations as they are installed in the watershed. The location and responsible charge of this data must be identified. Town Engineer??

DATA COLLECTION:

Water gage – data vs time

Reinhard Ludke Secretary

C:\R\PROPOSAL\2006\IP206801 Town of San Anselmo\Flood Advisory Committee\MEETING MINUTES 061213.doc

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Home Elevation Grant Informational Meeting Oct. 10, 2007

In attendance: Troy Van Dongen, Shuyu Kaufmann and representative, Sandy Partee, Nathan and Ozlem Bishop, Anna Staff, John Bartolomi, Tom Kansora, Debra Stutsman (Town), Thea Liskamm (Dimensions)

General: We have information available for your review.

A list of Home Elevation Grant Information Links.

A copy of the October 2, 2007 letter from OES to FEMA requesting that FEMA investigate the delay in this year's environmental process.

A copy of the FY 2007 Flood Mitigation Assistance (FMA) Program Guidance (available online or hard copy at Town Hall).

Questions from the group:

What is the formula used for the cost/benefit analysis?

Will studies performed prior to the official grant approval date be covered by the grant? (i.e. architect, design, engineer, etc.)

How were the original estimates submitted with the grant application calculated?

Does the property have to be in a flood plain or flood hazard area to qualify for this grant?

Should we contact the FEMA personnel and/or the URS contractors responsible for performing the environmental/historic review?

Next Steps:

If you have updated written estimates for your home elevation project please submit them ASAP to Thea or Debra at Town Hall either via email or in person.

Plan to meet as a group on October 30th at 7pm. Paul Ransome from OES has committed to attending this meeting. We are crossing our fingers that FEMA will have approved the project by this date so that we can meet as a group and come to a consensus about our next steps

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Email to Residents after Elevation Meeting with OES October 30, 2007

At last night's meeting, Paul Ransom of OES gave us a lot of good information about the grant process.

He says that he expects grant approval in January sometime, when they have completed the historic and environmental review. Town staff must now set all the parameters for the grant, including the process that must be followed, paperwork that must be completed, how reimbursements will be scheduled, and how projects will be prioritized. As you can imagine, setting all that up and administering it is a big job. We will have to take money off the top of the grant to pay a consultant to assist us with this work, probably \$35,000 - \$50,000.

We expect to submit for the new grant cycle in mid-March, but, of course, there are no guarantees that we will get any more money.

Paul will be getting back to me early next week with the amount that we've been awarded, so we can make a more informed decision about dividing up this year's money. We know it is around \$700,000. The participants at last night's meeting wanted to meet again to discuss the division of money because the money we have now is significantly more than we previously discussed.

It looks like most people are getting estimates for their elevations at around \$175,000 to \$200,000. If that's the case generally, if we fund the full 75% we would only be able to elevate four homes in this cycle.

I have given this issue a lot of thought since last night, and Thea and I remained after the meeting for about an hour talking with Paul. I am thinking that the fairest thing to do is to make the rule that the grant will pay for 75% of the eligible elevation costs, up to a maximum of \$____. I don't know what that magical maximum number is, \$75,000, \$90,000, \$100,000 etc.

We have set another meeting for **Thursday, December 6, at 7:30 p.m. in the Historical Museum on the first floor of the Library** (the Council Chambers is booked).

By that time, I hope I will have more information for you. In the meantime, **if you are no longer interested in being included in the grant group in this year's grant cycle, please do let me know as soon as possible.** As I said, we will commit to submitting again next year, but there aren't any guarantees.

Please feel free to call or email me if you have individual questions/problems etc. and would like to discuss privately.

Sincerely,

Debbie

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Letter to Grant Participants

Dear participants in the home elevation grant request,

As you know, the Town submitted a Notice of Intent (NOI) to State OES for the right to apply for a grant to help residents with home elevations. That NOI was accepted, and now we must put together the grant package before November 4. As I've mentioned before, there is an enormous amount of work to be done to prepare the grant.

The Town's consultant will be helping us with this process, but we will also need considerable help from all of you. We have scheduled a meeting for **Thursday, October 5, 2006 at 7:00 p.m.** so that we begin work on preparing the grant application. The meeting is scheduled to be held in the **San Anselmo Library, at 110 Tunstead.**

If you already have plans for elevating your home, engineered documents, contractors estimates, etc. please bring them with you to the meeting as they will help us with some of the preliminary data gathering.

If you aren't able to attend the meeting, please let me know so I can be sure that you receive all the information you will need.

Please let me know if you have any questions and I'll try to find the answers. If you know others who would like to be included, please feel free to pass this information on to them as it is still possible to join.

Sincerely,

Debbie

Debra Stutsman, Town Manager
Town of San Anselmo
525 San Anselmo Avenue
San Anselmo, CA 94960
(415) 258-4652 (voice)
(415) 459-2477 (fax)

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Record of Public Input from Open House

Cc: Debbie Stutsman

Sent: Wednesday, December 12, 2007 9:56 AM

Subject: San Anselmo FEMA Issues

Thanks for calling yesterday Tom. The Project Worksheet (PW) numbers that correspond with the issues outlined in the November 15 memo we sent you are as follows:

1) Hazard Mitigation Plan (HMP) for Police Station (PW 3625), HMP for Fire Station (PW 3499).

Funding approved for both in May & June of 2007 but we were told in early November that the HMPs need to be revised to mitigate to a 500 year flood level rather than the previously agreed upon 100 year level. FEMA has not provided us with a Base Flood Elevation (BFE) to meet this 500 year flood level and we need help moving this forward ASAP to prevent future flood damage. (When we held an open house recently to show our public that the repairs had been made and the Police were back in place at Town Hall we were repeatedly asked why we hadn't done anything to prevent future flood damage. The reason is because our HMP has not been approved and we are waiting for FEMA to help us protect the Police Station.)

2) Second appeal for time extension for temporary Police Station (PW 3739) for \$99.4K

3) FEMA ADA upgrades for Police Station (PW 3625) and Fire (PW 3499)

4) Ghilotti Brothers appeal (PW 2223-1) for \$127.2K

5) Adjustments for National Flood Insurance Program (NFIP) insurance proceeds not received covers PW 2739 Town emergency protective services (\$35,491), PW 3499 Fire Station (\$131,588), PW 3625 Police Station (\$185,510) & PW 3627 Library (back in September we heard that PW 3627-1 was in NEMIS--the FEMA database--for \$108,491 but has not been approved yet).

6) FY 2007 Flood Mitigation Assistance (FMA) home elevation grant has not been officially approved.

If you have any more questions I will be here this morning at 415/258-4660 or you can reach Debbie directly at 415/258-4652. Thanks, Thea

Public Participation Methodology

Marin County Flood Control District Public Outreach

Reference:

1. Larkspur/San Anselmo Flood Mitigation Plan
2. Phone Interview between Theresa Hayes & Jack Curley, Marin County Flood Control District Zone 9
3. Ross Valley Flood Protection and Watershed Program

November 8, 2007

3:00-3:45 pm.

Introduction

Dimensions Unlimited Consultant Theresa Hayes contacted Jack Curley to obtain information on behalf of the City of Larkspur and San Anselmo's Flood Mitigation Plans.

Objectives:

Verify information provided in the Ross Valley Flood Protection & Watershed Program website library

Gage progress and future planning

Obtain additional information and mapping

Identify flood mitigation strategies for

Feasibility

Cost benefit analyst

Multi-jurisdictional cooperation

Quantify baseline documents; such as "A Framework for Developing Effective Management Solutions to Flooding in the Ross Valley Using Hydraulic Modeling"

Additional public comments and recommendations

Jack's Comments:

The Ross Valley Flood Protection & Watershed Program has been stopped due to pending lawsuits for two sources.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Mr. Ford Green, City of San Anselmo citizen

Marin County Taxpayer Association

The document "Ross Valley Solutions Framework" outlines the short, intermediate, and long term goals for: flood damage prevention & reduction, mapping and land use regulation, flood preparedness-safety public information & floodplain management planning flood insurance program habitat restoration and improvement of fish passage river parkways financing strategy

The program has completed all the short term goals. The program is stopped at Intermediate-Term Flood Peak Detention.

Develop hydrology model necessary to evaluate feasible concepts.

Plan, design and fund key upstream dry detention dams and floodplain storage basins on major tributaries to reduce flood peaks.

Jack stated funding is needed to move forward for feasibility studies to determine when upstream dry detention dams and floodplain storage basin would be most cost effective. The Storm Drainage Fee was passed by 67% of the vote, but the lawsuits challenging the validity of the ballot is holding up jurisdictional funding. The estimate for the feasibility study is approximately \$300,000.

All public documents are available on the Ross Valley Flood Protection and Watershed Program website through the library. New flood maps are in the process of being updated and will be available new summer from the Marin County Flood Control District.

The City of Larkspur Sediment Dredging Project projected cost of 10-15 million dollars is cost prohibitive for the City. The Corps of Engineer standards were flawed from the beginning. The dredging may not be as extensively as required, which would reduce the total costs. (The "Ross Valley Solutions Framework" is constructed to meet CRS ratings for all the participating jurisdictions. Each jurisdiction will be responsible for meeting the CRS requirements and application.

Conclusion

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Town of San Anselmo Public Outreach

Town Manager's Letters to the Public via the Town Website



DISASTER RECOVERY NEWSLETTER 1
Wednesday, January 4, 2006

Welcome to the first edition of the Town's daily Disaster Recovery Newsletter. We will be issuing the newsletter at the end of each day to update merchants and residents on the status of recovery efforts from the flood that occurred on Saturday, December 30, 2005. It is our hope that the newsletter will help to keep our communication channels open.

Special Town Council Meeting January 3, 2006

At a special Town Council meeting on Tuesday, January 3, the Town Council heard comments from merchants and residents about the Town's response to the flood event. As a result of the input, this newsletter will be published each day with news of general interest to the residents and business people in San Anselmo in an effort to improve communications. In addition, the Town is working with the County to have a website with links to FEMA, the State Office of Emergency Services and the County Office of Emergency Services and any other websites that would be of assistance in navigating through the process. That website should be on line tomorrow and will be published in the Thursday newsletter.

Assemblyman Joe Nation attended the meeting and said the state is taking steps necessary to obtain FEMA assistance. Supervisor Hal Brown offered additional assistance to the Town as well.

County of Marin Efforts

The County of Marin opened a Recovery Operations Center (ROC) yesterday to coordinate the disaster recovery and public information within the County. The ROC will be open from 8:00 a.m. to 5:00 p.m. throughout this week and will remain open later if necessary. The ROC will be staffed by County employees to assist with disaster recovery operations, planning, public information and finances. The ROC will also have a public hotline number (473-5614) to answer questions regarding the response to the winter storm.

As an aside, our own **Ian Roth**, newly-elected Councilmember, is a member of the ROC team in his professional capacity as a County employee.

Visit by Lynn Woolsey

This afternoon Congresswoman Lynn Woolsey visited downtown San Anselmo. She visited a number of San Anselmo shops and saw the flood damage. Congresswoman Woolsey has offered her support and assistance to the Town as we work our way through this crisis. She was accompanied by Supervisor Cynthia Murray and San Anselmo Mayor Barbara Thornton. We all appreciate the fact that she took the time to personally see the damage caused by Saturday's flood.

Marin County Officially a Disaster

Governor Arnold Schwarzenegger declared Marin County a State Disaster County yesterday. In the North Bay Marin joins Napa and Sonoma Counties.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

An informal survey done by Town Councilmember Ted Freeman showed about 25% of the downtown businesses are already open. Coffee Roasters was bustling this morning with customers getting lattes and pastries. Comforts is back serving Chinese Chicken salads. Other businesses that are open include Sproos, Cucina, and The Ranch. Welcome back to all the businesses that have reopened.

San Anselmo Avenue Closure

San Anselmo Avenue and adjacent side streets will be closed on Friday morning, January 6th, from 6 a.m. to approximately 1 p.m. so that Marin Sanitary Service and Ghilotti Bros. can do a final clean-up of flood debris. Merchants and residents are asked to place flood debris on the street, two feet from the curb by Friday morning. When the street is reopened it will be clean again! Many, many thanks to both Marin Sanitary and Ghilotti Bros. who came to town Saturday morning and have been working ever since!

Town News

The **Library** will be closed through ^{Tuesday} Monday, January 17, 2006. The Library basement had three feet of water in it and the entire area must be vacated, including the Historical Museum. The offices and working areas of the Library must be relocated to a trailer.

The **Police Department** has rented space at 400 Red Hill Avenue and will be moving in early February. In the meantime they are operating out of the second floor conference room at Town Hall.

The **Fire Department** offices are currently operating at Fairfax's Fire Station as the lower floor is not habitable. They are in the process of making arrangements for temporary quarters.

The **Council Chambers** is unusable as well; Town meetings will be held in alternate locations, probably at the Ross Valley School District offices at 110 Shaw Drive.

FEMA Information

Phone 1-800-621-3362
Website: www.FEMA.gov

Town Hall Information

Emergencies	911
Police non-emergency	258-4610
Fire non-emergency	258-4686
Town Hall	258-4600 (during business hours)

Good luck to everybody as we all navigate through the recovery process. Suggestions for items to be included in this newsletter should be sent to Debra Stutsman at Town Hall, 258-4600.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



DISASTER RECOVERY NEWSLETTER 2
Thursday, January 5, 2006

Website Information

At the Town's request, the County of Marin has established a Disaster Recovery website that contains links to a number of sites that provide valuable recovery information to residents and merchants. To reach the website, go to www.townofsananselmo.org and click on the link for comprehensive disaster recovery information. In addition, we have gathered a number of video clips and still photos that will be available for viewing on the County website tomorrow. The County has been very helpful to us in getting the site operational quickly. Anyone who has ideas for information to include in the site should call Town Hall at 258-4600 or email info@ci.san-anselmo.ca.us.

Police Department Warning

The San Anselmo Police Department has received information that local businesses affected by the flood have been receiving offers of loans to assist them in the restoration of their businesses. The callers, claiming to be from legitimate lending institutions, have told the merchants that their loan companies have been endorsed and/or approved by the San Anselmo Chamber of Commerce. The San Anselmo Chamber of Commerce has not endorsed any such lenders, and was not involved in any solicitations for loans. Merchants are cautioned that any such offers may either be fraudulent or at above market interest rates.

Thank you Flash Photo

Signs are going up downtown announcing opening dates for business, thanks to Joe Ranno of Flash Photo. Visitors to downtown will quickly be able to see what businesses are already open for business and find out when their favorite downtown shop will open, if it isn't already. Many thanks to Joe and the Chamber for putting so much energy into this project.

Businesses Open

The number of businesses that have reopened increased exponentially today. The list includes Jack's Drug Store, Fig Garden, Ludwigs, Seawood Photo, Bank of America, Wells Fargo Bank, Luxurious Nails, Focus Opticians, Bistro 330, San Anselmo French Cleaners, U. S. Bank, Linda's Flower Box, San Anselmo Art Glass Studio and Gallery, Susan's Storeroom, Atelier Marin, Sassy Hair Styling and Sassy Nail Care, Byrum & Fleming CPA's, Comforts, San Anselmo Inn, Ross Valley Winery, San Anselmo Barber Shop, Cucina Restaurant & Wine Bar, Bloomworks, La Seda Bella, Benevenuto, Easy Pieces, Coffee Roasters, Sproos, Paradigm Cycles, Gioia Boutique, Quick 'n Easy, Bridge Street Salon and Sunglass City. Fleet Feet is scheduled to open tomorrow.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

FEMA Status

San Anselmo had an initial visit today from a FEMA representative to view flood damage firsthand. He was escorted by Building Official Keith Angerman. We are expecting another visit from FEMA representatives on either Friday or Monday. Keith is working on accumulating the data required by FEMA on damage to public buildings in San Anselmo, which includes the Police Department, Fire Department, Town Council Chambers, Library, Sir Francis Drake High School, Brookside Lower Campus and the San Anselmo Post Office. All this work is in anticipation of submitting the necessary paperwork to request that the President declare Marin a federal disaster area. When a federal declaration is made, we are very hopeful that a local FEMA and Small Business Administration (SBA) office will be set up to assist residents and merchants. Supervisor Hal Brown, Assemblyman Joe Nation, Congresswoman Lynn Woolsey and Senator Barbara Boxer have all pledged their support to ensure San Anselmo gets the help it needs in this area.

FEMA Information

Phone **1-800-621-3362**
Website: **www.FEMA.gov**

County Information

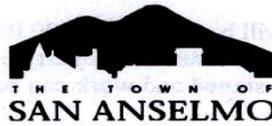
Recovery Operations Center (ROC) 473-5614
Recovery information website (can also be reached through link on San Anselmo website):
<http://www.co.marin.ca.us/depts/ES/disaster06/index.cfm>

Town Hall Information

Emergencies	911
Police non-emergency	258-4610
Fire non-emergency	258-4686
Town Hall	258-4600 (during business hours)
Website	www.townofsananselmo.org

Good luck to everybody as we all navigate through the recovery process. Suggestions for items to be included in this newsletter should be sent to Debra Stutsman at Town Hall, 258-4600.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



DISASTER RECOVERY NEWSLETTER 3
Friday, January 6, 2006

Website Information

As a reminder, for comprehensive disaster recovery information, flood video and still pictures, go to www.townofsananselmo.org and click on the link for comprehensive disaster recovery information. If you have pictures of the flood, we'd like to have them at Town Hall for our historical records and possible inclusion on the website. Anyone who has ideas for information to include on the site should call Town Hall at 258-4600 or email info@ci.san-anselmo.ca.us.

FEMA Status

The Town was visited today by representatives Of FEMA and the State Office of Emergency Services (OES). They were here to visit the public facilities that were flooded, including Brookside Lower Campus, the Fire Department, the Police Department and the Library. Matthew Hymel, Marin County Administrator, Chris Godley of Marin OES and Recovery Operations Center representative Ian Roth accompanied the State and Federal representatives on the tour, along with Town staff. We are hopeful that by the end of next week or early the following week we will receive the federal disaster designation.

Town Sponsored Cleanup Ends

Today was the last day for the Town-sponsored cleanup effort. After today, please call a commercial debris box company for debris removal. Local companies that provide debris box services include:

Grange Debris Boxes 456-2712
Marin Sanitary Service 456-2601

*calling to R/V of debris box:
① get name, address & telephone #
② give info to Rose*

Thanks, Thanks, Thanks

On Saturday morning shortly after the flood waters receded, the Town received a call from Patty Garbarino, President of Marin Sanitary. She asked what they could do to help us and the rest is history. Marin Sanitary has been hard at work in San Anselmo for a solid week, taking away flood debris as fast as possible. Also on the scene immediately was Mike Ghilotti of Ghilotti Bros, who appeared with loaders and trucks and teamed up with Marin Sanitary to get the job done. Many thanks to the owners and employees of both companies for their tremendous support!

Hal Brown Visit

Mayor Barbara Thornton had a visit today from Hal Brown. It was an opportunity to update Hal on our recovery efforts, and for him to see firsthand how much progress has been made. Hal has been very supportive all week, and has offered whatever assistance the County can provide to help San Anselmo through this difficult time.

*Anthony Boehle - P.A.
Ross Valley School*

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Police Department Temporary Location

In early February the Police Department will be moving to 400 Red Hill Avenue. Through the extraordinary cooperation and flexibility of the current property owner, Fred Shepherd, and the soon-to-be owner, Steven Kesten, a lease has been signed and work can begin immediately to get the site ready for our police operation.

Town Offices Closed

The Town offices will be closed this weekend. This has been an extraordinarily taxing seven days for everybody in San Anselmo, including our employees. Most employees have been working long hours for seven to ten days straight in unusually difficult circumstances. We are taking some time to rest and come back on Monday fresh. The Police Department is available through the phone in front of the office should the need arise.

Sandbags

We've had some requests to remove the sandbags in front of stores. We are very reluctant to do that since it is just early January, and the winter storm season is still in full force. Bags should remain in place for at least another month in case another fierce winter storm hits our area.

FEMA Information

Phone 1-800-621-3362
Website: www.FEMA.gov

County Information

Recovery Operations Center (ROC) 473-5614
Recovery information website (can also be reached through link on San Anselmo website):
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Town Hall Information

Emergencies 911
Police non-emergency 258-4610
Fire non-emergency 258-4686
Town Hall 258-4600 (during business hours)
Website www.townofsananselmo.org

Good luck to everybody as we all navigate through the recovery process. Suggestions for items to be included in this newsletter should be sent to Debra Stutsman at Town Hall, 258-4600.

*Library will be open Tuesday 1/17
Mold info - v tel directory under "Water Damage Restora
any donation checks to Town - give to S.P.*

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



DISASTER RECOVERY NEWSLETTER 4
Monday, January 9, 2006

Website Information

As a reminder, for comprehensive disaster recovery information, flood video and still pictures, go to www.townofsananselmo.org and click on the link for comprehensive disaster recovery information. If you have pictures of the flood, we'd like to have them at Town Hall for our historical records and possible inclusion on the website. Anyone who has ideas for information to include on the site should call Town Hall at 258-4600 or email info@ci.san-anselmo.ca.us.

FEMA Status

Today San Anselmo was visited by representatives from FEMA and the State Office of Emergency Services (OES). Town Administrator Debra Stutsman and Public Works Director Rabi Elias took the team on a walking tour of **private flood damage, including both businesses and residences**. Last week the FEMA and OES representatives were looking at just public buildings.

The intent of the visit was to view a representative sampling of businesses and homes that suffered flood damage. The walking tour included visiting about ten businesses on San Anselmo Avenue, including Riccardo's, Various and Sundries, Chadwick's and Ciao Ragazzi.

The residential areas that were visited on the walking tour included the apartments at 100 Sycamore Avenue and homes along Sycamore and Nokomis Avenues.

Finally, the team was taken on a driving tour to survey flood damage on Sais, Bella Vista, Saunders, Morningside, Meadowcroft, and the side streets off San Anselmo Avenue.

The Marin County OES has been working hard, with the help of affected towns and cities, to accumulate parcel by parcel data on flooding across the County. When compiled, that data will be forwarded to the State of California, where it will be combined with data from other affected counties in the state. The next step would be for Governor Schwarzenegger to request that the President declare the State a disaster area, which would allow us to receive federal disaster assistance.

All indications are that the President could make a decision by the end of the week, or, more likely, at the beginning of next week regarding a federal disaster proclamation. We are pleased that this process is moving along expeditiously.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Town Sponsored Cleanup Ends

Friday was the last day for the Town-sponsored cleanup effort. If you need further cleanup, please call a commercial debris box company for debris removal. Local companies that provide debris box services include:

Grange Debris Boxes 456-2712
Marin Sanitary Service 456-2601

FEMA Information

Phone **1-800-621-3362**
Website: **www.FEMA.gov**

County Information

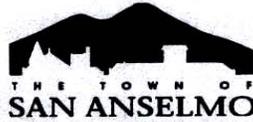
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Town Hall Information

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Town Hall 258-4600 (during business hours)
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TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



DISASTER RECOVERY NEWSLETTER 5
Tuesday, January 10, 2006

County of Marin Health Department

A number of people have questions about measures that need to be taken to prevent mold and bacteria in buildings that were flooded. Dave Smail of the County Health Department (499-6916) is available for answering your questions.

Residential Report

San Anselmo has about 300 residences that were affected by flooding. The worst hit neighborhoods include Nokomis, Sycamore, Madrone, Sais, Meadowcroft and Morningside, and the side streets off San Anselmo Avenue. In the hardest hit neighborhoods, residents are dealing with the loss of most of their possessions, clean up, construction work and the search for a place to live. If you know people living in these neighborhoods, I know they could use an encouraging word, a meal, help with a load of laundry or just a helping hand. San Anselmo community members have been generous with their time and talents and that spirit of community is much appreciated!

Downtown Business Report

A survey of downtown businesses done today revealed the following information:

- 97 businesses were surveyed, and 46 (or 47%) are already open.
- 51 businesses are closed, but 30 indicate they will be reopening soon.

Businesses that are open include:

Whole Athlete	Four Finch	Kerry & Salman Optometrists
Studio Home	Sassy Hair Styling	Atelier Marin
Susan's Store Room	SA Art Glass	Linda's Flower Box
Heldfond Book Gallery	SA French Cleaners	Bistro 330
Comforts	SA Inn	Focus Opticians
Luxurious Nails	Wright & Boudett	Crystal Reflections
Ludwig's	SA Barber Shop	Cucina Restaurant
Bloomworks	Postal Services Plus	Dove Place Too
La Sede Bella	Benevenuto	Gunning's Hobbies
Easy Pieces	SA Coffee Roasters	Sproos Hair Salon
Debbie Does Dessert	Body Time	Booksmith
Hair Studio	Sunglass City	Sidekicks
Fleet Feet	Gravywheels	Gioia
Orchid Thai	Taco Jane's	Wells Fargo
Seawood Photo	Jack's Drugs	U.S. Bank
Bank of America		

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Welcome back to all the businesses that have reopened, and best wishes to those businesses who are still dealing with the aftermath of the flood.

The San Anselmo Chamber of Commerce and the Town of San Anselmo will be jointly sponsoring a publicity campaign that says "How can you help us? Shop San Anselmo." Look for the publicity soon.

Website Information

As a reminder, for comprehensive disaster recovery information, flood video and still pictures, go to www.townofsananselmo.org and click on the link for comprehensive disaster recovery information. If you have pictures of the flood, we'd like to have them at Town Hall for our historical records and possible inclusion on the website. Anyone who has ideas for information to include on the site should call Town Hall at 258-4600 or email info@ci.san-anselmo.ca.us.

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FEMA Information

Phone	1-800-621-3362
Website:	www.FEMA.gov

County Information

Recovery Operations Center (ROC) 473-5614
Recovery information website (can also be reached through link on San Anselmo website):
<http://www.co.marin.ca.us/depts/ES/disaster06/index.cfm>

Town Hall Information

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Fire non-emergency	258-4686
Town Hall	258-4600 (during business hours)
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TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



DISASTER RECOVERY NEWSLETTER 6
Wednesday, January 11, 2006

Planning and Building Information

We are getting a number of questions at Town Hall about the Planning and Building process. Town staff is committed to streamlining the permit process for flood victims. Here is some information that may be helpful:

- The Town will waive building permit and Planning review fees for flood damage. If additional non-flood related work is being done at the same time, permit fees will be charged.
- Building permits and Planning review for flood-related work will be fast-tracked to ensure that work can be done expeditiously.

Building permits are needed for most work that will be done in the recovery process, including sheet rock, stud replacement, electrical wiring and plugs, water heater replacement, heater and duct replacement. The purpose of the permit is to ensure that the work is done in accordance with the Building Code.

Planning Department approval is needed when replacing portions or all of a dwelling or accessory structure that do not meet current development standards (distance from property lines, height, lot coverage, parking). In some instances, replacement in kind is permitted; in other cases, a variance and/or design review may be required. The Planning staff is happy to answer your individual questions between 8:30 a.m. and 12 noon Monday through Thursday and can be reached at 258-4616.

County of Marin Health Department

A number of people have questions about measures that need to be taken to prevent mold and bacteria in buildings that were flooded. Dave Smail of the County Health Department (499-6916) is available for answering your questions.

Fire Department News

Due to flood damage to the headquarters station at 777 San Anselmo Avenue, the Administrative Offices of the Ross Valley Fire Department have been temporarily relocated to the Fairfax Fire Station at 10 Park Road, Fairfax. If you need a construction inspection, resale inspection or have other business with the department, you can still go to the San Anselmo Avenue station. However, please be aware that if the firefighters are out of the station on calls, there may be no one available to assist you.

On Friday, January 13, the department will take delivery of an office trailer to set up temporary offices while the station is repaired. The public will be able to access this trailer from either side of the station. It will be set up behind the station, in the parking lot. It will be open for public business on Tuesday, January 17. The phones are answered during normal business hours. As always, for any emergency situation, **remember to dial 9-1-1.**

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Website Information

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Grange Debris Boxes	456-2712
Marin Sanitary Service	456-2601

FEMA Information

Phone	1-800-621-3362
Website:	www.FEMA.gov

County Information

Recovery Operations Center (ROC)	473-5614
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Recovery information website (can also be reached through link on San Anselmo website):
<http://www.co.marin.ca.us/depts/ES/disaster06/index.cfm>

Town Hall Information

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Fire non-emergency	258-4686
Town Hall	258-4600 (during business hours)
Website	www.townofsananselmo.org

Good luck to everybody as we all navigate through the recovery process. Suggestions for items to be included in this newsletter should be sent to Debra Stutsman at Town Hall, 258-4600.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



DISASTER RECOVERY NEWSLETTER 7
Thursday, January 12, 2006

Property Reassessment Information

The Marin County Office of the Assessor-Recorder is currently identifying taxable property that was damaged or destroyed by flooding and whose owners may be entitled to property tax relief. The emergency relief is available for taxable property including residences, commercial buildings, boats, aircraft, and business personal property locally assessed. It is not applicable to business inventory or personal items such as household goods and furnishings.

According to California Law and a Marin County ordinance, owners or persons responsible for property taxes and whose taxable property was damaged or destroyed by a misfortune or calamity (e.g. fire, flood, or other disaster) may be entitled to relief if they are without fault, and their loss equals or exceeds \$10,000. A written "Application for Reassessment" must be timely filed with the County Assessor, within 60 days of the occurrence. The law allows for an extension of this time period, but stipulates that it must not exceed twelve months from the date the damage occurred.

Deferral of tax payments also may be available for owners of eligible property when a claim is filed with the Assessor, along with the filing of the "Application for Reduced Property Assessment" as a result of misfortune or calamity for a county proclaimed by the Governor to be in a state of emergency. This provision applies to damaged real property and manufactured homes eligible for the homeowner's exemption on the regular secured roll for the current fiscal year, but not to property taxes paid through impound accounts.

Additional information regarding these provisions and application forms for disaster relief may be obtained by writing the Office of Assessor-Recorder, County of Marin Civic Center Branch, P. O. Box C, San Rafael, CA 94913 or by telephone at (415) 499-7215 between the hours of 9:00 a.m. to 4:00 p.m. Forms may also be available at the Assessor-Recorder's web site at <http://www.co.marin.ca.us/depts/AR/Main/FormIndex.cfm#Calamityform.pdf>.

Town Council Information

At the regular meeting of January 10, Councilmember Peter Breen suggested that the Town establish a Flood Control Review Committee made up of six to seven individuals with expertise in the area of engineering, flood control, hydrology, etc. The purpose of the group would be to review flood control activities being taken regionally and to recommend to the Town Council local measures that may be taken immediately to reduce flooding risk. Town staff will be placing an item on the January 24 agenda regarding the Flood Control Review Committee.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

County of Marin Health Department

A number of people have questions about measures that need to be taken to prevent mold and bacteria in buildings that were flooded. Dave Smail of the County Health Department (499-6916) is available for answering your questions.

Website Information

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Town Sponsored Cleanup Ends

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Grange Debris Boxes	456-2712
Marin Sanitary Service	456-2601

FEMA Information

Phone	1-800-621-3362
Website:	www.FEMA.gov

County Information

Recovery Operations Center (ROC)	473-5614
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Good luck to everybody as we all navigate through the recovery process. Suggestions for items to be included in this newsletter should be sent to Debra Stutsman at Town Hall, 258-4600.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



DISASTER RECOVERY NEWSLETTER 8
Tuesday, January 17, 2006

Status of Federal Disaster Declaration

We are continuing to wait for the federal government to declare the county a federal disaster area. Last week, County and local town/city staff completed the preliminary damage assessment of the storm damage across the county. This assessment, conducted with the assistance of teams from FEMA, the Small Business Administration (SBA) and the State Office of Emergency Services (OES), provided information about the extent of the county's storm damage.

Information from the assessment will support Marin County's request for a federal disaster declaration and FEMA assistance. FEMA has indicated that a decision on the federal declaration will be made this week. Once the federal declaration is made, the County will provide information on the FEMA assistance available to the community, which may include low-interest loans for repairs to businesses and residences and assistance for debris removal.

Recovery Operations Center (ROC)

The County officially closed the Recovery Operations Center (ROC) on Friday, January 13, at 5:00 p.m. The public information hotline (415-473-5614) will remain open to continue answering questions from the public about recovery assistance, flood cleanup and other concerns. Following the closing of the ROC, a "disaster recovery working group" will be formed to continue coordinating information and technical assistance for the storm recovery efforts. The working group will include members from the County, cities, special districts and community groups to support and coordinate recovery efforts throughout the community.

Website Information

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Debris Box Information

Grange Debris Boxes 456-2712
Marin Sanitary Service 456-2601

FEMA Information

Phone 1-800-621-3362
Website: www.FEMA.gov

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

County Information

Health Department, David Smail 499-6916
Recovery Operations Center (ROC) hotline 473-5614
Recovery information website (can also be reached through link on San Anselmo website):
<http://www.co.marin.ca.us/depts/ES/disaster06/index.cfm>

Town Hall Information

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TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

San Anselmo News



Debra Stutsman, Town Administrator
dstutsman@ci.san-anselmo.ca.us

February 3, 2006

Welcome to the first edition of San Anselmo News – At Town Hall we are always looking for ways to better communicate with residents and merchants. A web-based newsletter seems a good start, although I know that not everybody has access to a computer. A printed version of the newsletter is available at Town Hall, the Library, posted on the Public Notice Bulletin Board outside the Council Chambers and printed in the Ross Valley Reporter. In addition, we have an email subscription list started. See below for more details.

Flood Retrospective - Immediately after the devastating flooding on December 31, the residents and merchants of San Anselmo showed their true grit. Not only did volunteers show up to help with the dirty, soggy work of cleaning up, but those most affected just got down to the business of cleaning up and getting back to life. Proof positive that San Anselmo has a strong community spirit that will carry us through anything.

Town Facilities Flood Recovery – Cleanup efforts began immediately after the flood in the Police Station, Council Chambers, Library and Fire Department. All four facilities were severely damaged, requiring the removal and disposal of ruined furniture, office equipment, supplies, carpet, sheetrock, insulation and linoleum. That effort is about 80% completed at this writing.

The **Library** has set up temporary offices in trailers in back of the Library while the basement is off-limits. Library hours are Monday 10 am to 8 pm, Tuesday and Wednesday 10 am to 6 pm and Saturday 10 am to 5 pm.

The downtown **Fire Station** has temporary offices in their back parking lot, also in a trailer. The offices are open from 8 am to 5 pm Monday through Friday.

The **Police Department** continues to dispatch out of the downstairs facility until they can be moved into temporary facilities at 400 Red Hill Avenue. The move is anticipated to take place in late February, after the necessary work is completed on the building to accommodate the department.

The **Town Council and Planning Commission** are holding their meetings in the Ross Valley School District Board Room, 110 Shaw Drive, in place of the Council Chambers for the foreseeable future. The meetings begin at 7 pm.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

There is, of course, much concern in our community about flood control measures. The San Anselmo Town Council will hold a Town meeting on **Saturday, February 11, from 10 am to 12 noon in the Sir Francis Drake High School Student Center**, to discuss the flood and flood control efforts. This is an opportunity to learn more about the San Anselmo Creek, why it floods and options for minimizing flooding risks. The public is invited.

Flood Mitigation Working Group

The Town Council invites interested residents to apply for a seat on the newly-formed ad hoc Flood Mitigation Working Group. The group will be made of five community members, along with Councilmembers. Interested residents with expertise, experience or education in flood control, hydrology or engineering are invited to apply for appointment. A resume and letter of interest should be submitted to the Town Administrator by **Monday, February 6, 2006 at 3:00 p.m.** The charge of the group is to learn about the creek conditions in San Anselmo, review past work on flood control efforts, advocate for immediate and long range actions and advise Council representatives on regional Ross Valley flood control efforts.

Parking Enforcement Resumes

There has been no parking enforcement during the month of January due to the flood. However, in an effort to create turnover in downtown parking spaces for shoppers, enforcement **resumed on Wednesday, February 1**. This includes all metered and timed zones downtown, and overnight parking town wide. In an effort to accommodate the contractors who are working on flood repairs downtown, licensed contractors may receive a permit to park all day downtown by making application at the Police Department.

Questions and Answers

While most of January has been taken up with flood-related issues, the Town is still experiencing a severe fiscal crisis, which has been made worse by the flood. Residents have many questions about the flood, as well as the recent failed ballot measure, the Town's pension costs and other issues around the Town's finances. Please email your questions to me at dstutsman@ci.san-anselmo.ca.us. I will answer your questions, and I will include some in future newsletters.

San Anselmo News, published weekly on Fridays, available at San Anselmo Town Hall, Library, on the Public Notice Bulletin Board, and in the Ross Valley Reporter. Also available on the Town's website, www.townofsananselmo.org, and by email subscription. To subscribe to the email list, send an email to townclerk@ci.san-anselmo.ca.us.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

San Anselmo News



Debra Stutsman, Town Administrator
dstutsman@ci.san-anselmo.ca.us

February 17, 2006

Town Flood Meeting

On Saturday, February 11, about 100 interested residents attended the Town Meeting about the flood. The meeting was opened by Mayor Barbara Thornton, who introduced Supervisor Hal Brown. The Supervisor spoke about his commitment to finding a regional solution to the flooding problems in the Ross Valley.

Representatives of the County of Marin Public Works Department reported on the history of flood control efforts in the Ross Valley and presented satellite imagery showing the topography of the valley and the areas that flooded. Chris Godley, from the County's Office of Emergency Services, talked about emergency response and preparedness.

Town staff discussed the flood response, emergency notification systems, Planning and Building permit fee waivers and the streamlining of the process to ensure those affected by flooding receive prompt attention.

The Town meeting was filmed by volunteer Chris Keiser. A copy will be given to the Chamber of Commerce and the Downtown Merchants Association. In addition, copies will be available for checkout from the Library shortly.

Put the Heart Back in San Anselmo

The "Put the Heart Back in San Anselmo" festival held on San Anselmo Avenue on Saturday and Sunday, February 11 and 12, was a resounding success. The Downtown Merchants Association decorated the downtown with red heart balloons, and the heart of the community was certainly apparent. Shoppers crowded the downtown area, laden with purchases. Restaurants were busy serving customers and children enjoyed the jump house and cake walk. Congratulations to the Downtown Merchants Association for a very successful event.

Flood Committee

The Flood Committee held its first meeting on Saturday, February 11. The Flood Committee was appointed by the Town Council at its meeting of February 7, from a pool of 12 applicants. Selected for their expertise in hydrology, engineering and flood control systems were Glenn Dearth, Nicholas Johnson, Reinhard Ludke, Patrick Ritter and Richard Stutsman.

The Committee will be working with Vice-Mayor Wayne Cooper, Councilmember Peter Breen and Public Works Director Rabi Elias to identify short, medium and long-range solutions to the Town's flooding situation. The Committee will be working closely with the County of Marin, Flood Control District 9, Ross Valley towns/cities and other interested stakeholders.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Town Manager's Newsletter: May 12, 2006

Supervisor at the Pickleweed Community Center. Dave's experience in Recreation and his commitment to San Anselmo will be valuable assets for the Commission.

Tom McInerney has been a resident of San Anselmo for eight years. Unfortunately, Tom and his family were flooded out of their home on December 31 and are now busy elevating the structure and making repairs. Tom is committed to San Anselmo and feels blessed to live in a place with wonderful parks and a world class recreation program.

Welcome to the Parks & Recreation Commission, Dave and Tom. Thanks for giving back to your community!

Ross Valley Watershed

The County of Marin and the Ross Valley communities of Fairfax, San Anselmo, Ross and Larkspur are working on flood protection projects that will be in place before the next rainy season. With leadership provided by Supervisor Hal Brown and with a broad range of partners, the group is also developing innovative, watershed-wide solutions for long-term flood protection and creek restoration.

The 28-square mile Ross Valley Watershed starts at White's Hill in the north, encompasses the communities of Fairfax and Sleepy Hollow; through San Anselmo, Ross and Kentfield; and down to Larkspur, Corte Madera and Greenbrae where Corte Madera Creek flows to the Bay.

Supervisor Brown invites all community members to participate in the first community workshop on **Saturday, May 20th** to learn about flood protection solutions and to offer your feedback. **The workshop will be held from 9:30 a.m. to 2 p.m. in the Sir Francis Drake High School small gym, 1327 Sir Francis Drake Blvd., San Anselmo.**

Topics will include:

- A visual tour of what causes flooding in the Ross Valley
- Immediate actions in place for the next rainy season
- Comprehensive flood protection solutions
- Creek restoration and environmental enhancement
- Tips for what you can do.

Hope to see you there. Go to www.RossValleyWatershed.org for the agenda and more information.

Dates for the calendar

Lansdale Station Playground renovation – The Lansdale playground, located at Center Blvd. and San Anselmo Avenue, will be closed for renovation Wednesday, May 17 through Sunday, May 28. Adult volunteers are needed to work 3-4 hour shifts on Friday, Saturday or Sunday, May 19-21. For more information contact the Recreation Department at 258-4640 or the Parks Department at 258-4645.

Memorial Park Elders Garden – A work party will be held on Saturday, May 20, from 9 a.m. to noon in the Elders Garden, next to Millennium Playground. Let's tackle those weeds.

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TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



San Anselmo News

Debra Stutsman, Town Manager
dstutsman@ci.san-anselmo.ca.us

May 26, 2006

Ross Valley Watershed Community Workshop

The first Ross Valley partnership community workshop was held on Saturday, May 20, in the Drake High School small gym. The partnership is coordinating an integrated flood protection and creek restoration program for the entire Ross Valley Watershed. It has three major objectives:

- Comprehensive flood damage reduction,
- Conserving and enhancing the natural creek network, and
- Providing an affordable local financing plan.

County Supervisor Hal Brown began the effort by bringing together Ross Valley officials, community organizations and community members. The effort will look at the entire watershed, developing solutions that take into account natural creeks and the environment. The program includes flood control and flood damage reduction, as well as creek restoration to enhance riparian and aquatic habitat.

About 200 community members attended Saturday's meeting. Jack Curley, County Engineer, and Matt Smeltzer, a Consulting Engineer, gave a presentation on the forensic analysis of the December 31, 2005 flooding in the Ross Valley. Dave Dickson of Moore Iacofano Goltsman (MIG) presented flood protection solutions and a financial framework for the proposed program.

This community-based planned process will be moving forward quickly. For up-to-date information you can sign up to receive information about working group solutions, community workshops, creek information, new maps and more at www.RossValleyWatershed.org.

Look for more information on this effort in upcoming newsletters.

Telephone Emergency Notification System (TENS)

The December 2005 winter storm and flooding in the Ross Valley highlighted the need to get hazard warning information to local residents in a timely and effective manner. Your local officials have been working with the Marin County Sheriff's Office to develop the Ross Valley Flood Notification Area. San Anselmo and the other Ross Valley jurisdictions have reviewed the floodplain maps of their areas and indicated additional areas that should be included in the flood notification area to ensure full coverage within the system.

TENS is a high speed system that delivers emergency information or warnings to designated geographic areas, like our designated floodplain area. TENS is a combination of telephone,

TOWN OF SAN ANSELMO
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San Anselmo News

Debra Stutsman, Town Manager
dstutsman@ci.san-anselmo.ca.us

June 2, 2006

Ross Valley Watershed news

The Ross Valley flood protection and watershed program has a number of flood protection actions that are targeted for December 31, 2006, as follows:

Flood Warning Systems & Emergency Response

1. Flood preparation and response plan cards for community
2. Alternative routes for safe flood evacuation
3. Telephone Emergency Notification System (TENS)
4. Upgraded flood creek gauges and Town sirens.
5. Real-time flood information on website

Flood Insurance Program

6. Extensive National Flood Insurance Program links on website
7. Adopt the FEMA Community Rating System (CRS) framework for planning process.

Flood Damage Reduction

8. Identify creek system “choke points” and model combinations of flood control project elements.
9. Channel debris maintenance before the wet season, with existing resources.
10. New flood high-water mark map.
11. Flood proofing designs and tips on website
12. Improved sandbagging program.
13. Bank stabilization designs and permitting requirements on website.

The Ross Valley Watershed website (www.RossValleyWatershed.org) is a valuable source of information on actions being taken to address flooding in the Ross Valley.

San Anselmo News



Debra Stutsman, Town Manager
dstutsman@ci.san-anselmo.ca.us

June 16, 2006

Progress Report on Flood Activities

There is considerable work going on to address flooding issues in the Ross Valley:

Flood Committee – San Anselmo’s Flood Committee is made up of five volunteer community members with expertise in the areas of hydrology, flood control and civil engineering. They serve on the committee along with two members of the Town Council, Peter Breen and Wayne Cooper. The Committee has been meeting since March to identify short, medium and long-term solutions to the Town’s flooding problems. On Saturday, June 10, the Committee walked San Anselmo creek from Bridge Street to the Tunstead Bridge at Sir Francis Drake Blvd. to discuss protocol for a walk of the entire creek, scheduled for July 15 and 22. Meetings of the Flood Committee are open to the public and agendas are posted on the Town’s website at www.townofsananselmo.org.

Ross Valley Watershed Technical Advisory Committee - The County of Marin effort led by Supervisor Hal Brown to address watershed wide flooding problems is moving ahead quickly. County Engineer Jack Curley is dedicated full time to leading this effort. Work has begun to survey the entire creek, the first step toward preparing a hydraulic model. A Request for Proposals will be issued by the end of June for a hydraulic model of the creek, with funds requested through a grant from the Coastal Conservancy. One of San Anselmo’s technical volunteer members, Dick Stutsman, is representing San Anselmo on the Technical Advisory Committee.

Ross Valley Watershed Financial Working Group – This committee, comprised of the City Managers of Fairfax, Larkspur, Ross and San Anselmo and the County Director of Public Works, is working on how to pay for watershed improvement projects. A public opinion poll will be conducted at the end of June to assess voters’ willingness to support a ballot measure next spring to finance identified improvements through a benefit assessment district. The results of the poll will be available in mid-July. In addition, the Financial Working Group is pursuing grant funding through the California State Office of Emergency Services and FEMA.

There are two more community meetings planned this year regarding the Ross Valley watershed work. They are tentatively scheduled for Saturday, September 9 and Saturday, December 9, 2006. Community involvement in this process is key to its success!

San Anselmo News

Debra Stutsman, Town Manager
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July 14, 2006

Hazard Mitigation Grant Program

The application period is open for submitting a Notice of Intent for the government's Hazard Mitigation Grant Program (HMGP). Approximately \$10 million is available statewide to fund cost-effective mitigation projects, such as home elevations.

The Town is planning to submit a grant request on behalf of San Anselmo homeowners who wish to elevate their homes. If you are thinking about elevating your home and want to be included in the grant request, please send me an email at dstutsman@ci.san-anselmo.ca.us before July 21.

There is no guarantee that our grant request will be funded, and even if it is funded we would not receive the funds until after spring, 2007. FEMA will fund up to 75% of the project; 25% is a local share provided by the homeowner. One unfortunate caveat: FEMA will not grant funds to people who have already begun construction to elevate their homes.

Flood Video Available

The video of the flood, entitled **12/31**, is now available for checkout in the San Anselmo Library. The video was produced by local resident Ben Burt. Ben spent an incredible amount of time and effort collecting video footage and still pictures from many different sources and assembling it into a film that is a valuable piece of San Anselmo history. The film chronicles the events leading up to the creek overrunning its banks in the early hours of December 31, 2005, and the muddy aftermath.

The Town owes a big debt of gratitude to Ben for his volunteer service to the Town. Not only did Ben create this film of the 2005 flood, but he is also responsible for a video of the 1982 flood. That video is also available in the Library. Thanks, Ben!

Creek Care for Residents

A booklet entitled "Creek Care: A Guide for Marin Residents" is available at Town Hall. The booklet is designed to encourage and support the ongoing stewardship of creeks in Marin County. Sponsored by the Marin County Stormwater Pollution Prevention Program, the booklet gives information on managing unhealthy runoff in the storm drains, identifying creek pollution,

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

San Anselmo News



Debra Stutsman, Town Manager
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August 4, 2006

Flood Mitigation Update

People often ask what we are doing to reduce the risk of flooding in San Anselmo, next winter and in the future. While it may not be apparent to the casual observer, there is considerable work going on in this area.

San Anselmo's Flood Committee is working diligently to study the creek and make short, medium and long term recommendations to reduce the risk of flooding in San Anselmo. In line with that, the Committee conducted a creek walk last week and the members are working to consolidate the collected information. They expect to have the information organized for their next meeting.

In addition, the Ross Valley Watershed group, a joint effort of the County of Marin, Larkspur, Ross, San Anselmo and Fairfax, is also working to reduce the risk of flooding in the entire Ross Valley. The Watershed group has a Technical Advisory Committee, which includes members of the San Anselmo Flood Committee, and they are working diligently to get a hydraulic study underway so that a computer model of the creek can be created. With that information in place, the technical experts can make recommendations on what work should be done to reduce the risk of flooding

The Ross Valley Watershed group is also focusing on short, medium and long-term solutions. For the short term, the group has enlisted the help of the Marin Conservation Corps to do a large vegetation cleanup throughout the entire creek early this fall.

For the long term, we know that solutions to the flooding problem are going to require significant amounts of money. The Ross Valley Watershed Group is already applying for numerous grants, but matching funds will be required to be contributed by the county and municipalities. The Financial Committee, made up of the City/Town Managers and County Public Works Director, is exploring the possibility of a Ross Valley wide benefit assessment district to fund the requirement for grant matches.

In short, there is a lot going on to ensure that flooding problems are identified and addressed. It is important to remember that flooding problems must be addressed watershed wide. For example, if one town makes changes without taking into account all the relevant data, it could adversely affect those downstream. That's why it's important that we work together to get to solutions to our common problem.

For more information, see the Ross Valley Watershed website at www.rossvalleywatershed.org and the Town website at www.townofsananselmo.org/flood/index.htm.

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Creek Park Bank Stabilization Project

You may have noticed that there is some work going on in the creek adjacent to Creek Park. The Friends of the Corte Madera Creek Watershed are sponsoring the work, which is aimed at improving conditions in the San Anselmo Creek.

The work entails removal of some riprap (large rocks) and recontouring of the bank, which will slightly enlarge the capacity of the stream to carry flood flows. The invasive non-native vegetation is being removed and replaced with native plants to improve habitat for native fish, pond turtles, and the many birds that use streamside habitats.

The work has been coordinated with the creek cleanup efforts being done throughout the watershed by the County of Marin and several municipalities, including the Town of San Anselmo.

Funding for the project is provided by the State Water Resources Control Board, North Bay Watershed Association, Marin County Stormwater Pollution Prevention Program and the San Francisco Bay Regional Water Quality Control Board.

For more information, contact the Friends at info@friendsofcortemaderacreek.org.

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TOWN OF SAN ANSELMO
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San Anselmo News

Debra Stutsman, Town Manager
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November 3, 2006

Ross Valley Watershed

On Saturday, October 21, about 100 interested residents and merchants turned out to hear the progress that has been made thus far by the Ross Valley Watershed group. Made up of the County of Marin, the Towns of Fairfax, San Anselmo and Ross and the City of Larkspur, the Ross Valley Watershed group has been working since last winter to address flooding problems in the Ross Valley.

Engineer Jack Curley gave a thorough presentation on what has been done thus far. The Marin Conservation Corps has spent several weeks clearing vegetation from the creek in a one-time effort to reduce the vegetation. Through the Technical Working Group, a hydraulic model of Ross Valley creeks is being prepared. The hydraulic model, when finished, will allow engineers to better pinpoint causes of flooding in the Ross Valley. Through the computer modeling, they will be able to remove an individual bridge or building and determine what effect the removal has downstream. In the future, the computer model can help us better predict the risk of flooding in our area.

In short, a lot has been done, but there is still more to do. The Financial Working Group, made up of the City Managers of Ross, Fairfax, Larkspur and San Anselmo and the County of Marin Public Works Director, is working to recommend a way to pay for the substantial work that must be done to reduce the risk of flooding in the Ross valley. Look for more information in future newsletters on a possible ballot measure.

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San Anselmo News

Debra Stutsman, Town Manager
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January 11, 2008

Town Council meeting actions

At the Town Council meeting of Tuesday, January 8, the Town Council took the following action:

- Appointed Patricia Swensen to the Historical Commission and Linda Hoch, Barbara Dwyer and Leonard Charles to the Open Space Committee.
- Awarded the Downtown Fire Station 19 Flood Recovery and Improvement Project to the low bidder, SEB Construction, Inc., of Berkeley, in the amount of \$1,295,000.
- Directed staff to return with financing contract for the Fire Station Project, in the form of a 15 year municipal lease in the amount of \$1.7 million.
- Approved the project for drainage improvements at Elm Avenue and San Anselmo Avenue and awarded the contract to Maggiora Ghilotti in the amount of \$43,343.

The next Town Council meeting will be held on Tuesday, January 22, 2008, at 7:00 p.m. in the Town Hall Council Chambers, 525 San Anselmo Avenue. The agenda and staff reports for the meetings are posted the Friday before the meeting on the Town's website at <http://www.townofsananselmo.org/meetings/index.htm> and are available for viewing at the Library, Police Station and Town Hall.

Storm Wrapup

Creek Monitoring Equipment: Just prior to last Friday's big storm, the new Creek Water Level Monitoring chart was available on the Ross Valley Fire website at http://www.rossvalleyfire.org/sa_creek.html. The data produced by the gauge and the resulting chart were extremely helpful to our emergency responders in quickly assessing the threat of flooding.

The website chart is equally helpful to many residents who wish to keep a close eye on the creek. In fact, during Friday's storm it was popular beyond our wildest dreams! At the height of the storm, the website was swamped with too many hits and went down. We are now working to move the site to an outside host with more bandwidth so we can be assured that this valuable tool will remain working during periods of extremely high use. The creek monitoring equipment is also gathering important data on rainfall that will be used as we continue to work to reduce the risk of flooding in the Ross Valley.

Many thanks to the people who worked so hard to get the Creek Gauge hardware and software installed and operational and up on the website, including Jimmy Kulpa and Jeff Schuyler, Firefighter Scott Porter, Fire Chief Roger Meagor and Flood Committee member Dick Stutsman.

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PG&E Outage Information: Another very unfortunate result of last Friday's storm was many, many extended power outages in San Anselmo and across Marin. A number of San Anselmo residents called the Police Department for updates on the power outage situation over that weekend. Unfortunately, PG&E was so overwhelmed with the number of outages that it was some time before they were able to get back to us with an assessment of when residents might expect relief.

We are working closely with PG&E's Government Relations Representative in the North Bay to improve communications. We want to ensure that when we are again faced with power outages that Town officials receive periodic updates that we can pass on to affected residents.

Little Lingua: Spanish For Preschoolers

Are you looking to expose your child to Spanish at a young age? Then Little Lingua: Spanish for Preschoolers is exactly what you are looking for! The San Anselmo Recreation Department is now offering classes for preschoolers ages 2-5. Sign-ups will be taken for these classes beginning the week of January 14th. For more information call 258-4680 or visit us online at <http://www.townofsananselmo.org/recreation/index.htm>. Hurry because there are only limited spots available for these very popular classes!

Stay N' Play Sports Camp

Interested in being part of something new, fun, and exciting? Starting on February 4th there is going to be a new Stay N' Play sports camp for all 3rd-5th graders! It is going to take place right on the campus of Wade Thomas. You can sign up for one or two days (or both) on Monday and Wednesday. Sessions last for four weeks with a different sport picked for each session. To find out more information about the camp, you can contact San Anselmo Recreation at 258-4680 or visit us on-line at <http://www.townofsananselmo.org/recreation/index.htm>. Hurry to become a part of something exciting and new!

Important Sandbag Information

Sand and bags continue to be available on Sunny Hills Drive next to the tennis courts. Please bring your own shovel.

There is a certain technique to filling and placing sandbags. They should be filled with sand no more than 1/2 full with the top of the bag folded down on the underside. For more information, go to <http://www.oc.ca.gov/pfrd/programs/elnino/SandBagUse.html> or pick the information up at Town Hall.

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TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



San Anselmo News

Debra Stutsman, Town Manager
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January 4, 2008

Winter Preparedness

Town employees have been working hard to ensure that the Town is prepared for predicted heavy winter storms. The following actions were taken to advise citizens of the early January storms:

- Flyers hand carried to merchants on San Anselmo Avenue advising them of the weather service predictions of heavy winter rains.
- Email alert sent to the addresses on the Town Manager's newsletter email list.
- Telephone alert sent to all merchants regarding storms.
- Sand and bags available at the dead end portion of Sunny Hills Drive, near the tennis courts (across from Round Table Pizza).
- Links to National Weather Service, Winter Preparedness tips on Town's website at www.townofsananselmo.org.
- Creek water level monitoring equipment in place at Bridge Street and actual creek levels available for public viewing 24 hours/day at www.rossvalleyfire.org/sa_creek.html.
- AM Radio Station 1610 updated with storm information.
- 24-hour information line (258-4632) updated with storm information.

Town staff is on call 24 hours a day to respond to any storm-related emergency. When winter storms are predicted, stay tuned to local news broadcasts. San Anselmo specific information can be found on the website at www.townofsananselmo.org

Workshop on Lot Coverage/Floor Area Ratio Scheduled

The Town Council has scheduled a workshop to discuss in detail a possible ordinance to potentially reduce the maximum floor area of homes in San Anselmo below the 150 mean sea level elevation through a Combined Lot Coverage and Floor Area Ratio (FAR) Ordinance.

At present the size of these homes is partially managed by a 35% lot coverage maximum. Lot coverage measures the footprint of all structures on the lot, but does not include the area of an upper floor if it is within the first floor's footprint on the lot. Adding a Floor Area Ratio (FAR) would set an additional maximum for the square footage of each floor of an individual dwelling.

For the last year, the Council has been discussing and receiving public input on proposed changes to the Town's Zoning Ordinance, as recommended by a subcommittee of Planning Commissioners and Councilmembers. The discussions thus far have centered around a combination of the ratio of a structure's floor area to the size of the lot and the total amount of lot coverage by a structure.

The intent of the proposed ordinance is to ensure that homes built in San Anselmo reflect the character of our small town, while still allowing property owners to accommodate their growing families.

TOWN OF SAN ANSELMO
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The public is invited to attend the workshop to learn more about the concepts of lot coverage and floor area ratio. The Council will also hear public input on the topic.

The workshop will be held on Saturday, February 2, 2008, in the Town Council Chambers from 9 a.m. to 12 noon. All interested persons are encouraged to attend.

Flood Committee meeting

The next Flood Committee meeting will be held on Monday, January 14, 2008, in the Town Hall Conference Room at 525 San Anselmo Avenue. Among other agenda items, the Committee will hear a presentation from Jack Curley, County Engineer working for Flood Zone 9, of which San Anselmo is a member.

Potential Impact of New Construction Codes

The State of California has mandated that effective January 1, 2008 all cities and towns in the state must enforce the 2007 editions of the California Construction Codes. These were recently adopted by the San Anselmo Town Council with some amendments. The Town Council is only allowed to make amendments that are more stringent than the published codes.

The new California Codes are based upon the International Building Code, which is a combination of all the codes across the United States, so the new codes are very different from those used for many years by licensed contractors, architects, and designers.

A major change is the requirement that only a licensed design professional (engineer or architect) may design any structural work unless the work meets the very limited criteria for “conventional construction.” Something that appears as minor framing, such as installing a new window or door or opening a wall to create a pass-through from the kitchen to the dining room, may now need to be designed by an engineer or architect.

In addition to the major structural code changes, there are significant architectural changes for most required building dimensions and materials. The changes to the previous code are numerous and we recommend that homeowners contact a licensed design professional for assistance before applying for a building permit unless they are very familiar with the new codes and can demonstrate their work is conventional construction.

A listing of the specific 2007 editions of all the California Codes (Building, Electrical, Mechanical, Plumbing, Energy, Elevator Safety, Historical, Fire, Building Conservation) and the Town’s amendments can be found on the Town’s website under the Planning and Building Department, Building Division. A copy of the new building code will be available for public use at the Town Library in approximately one week. Copies may be purchased directly from the ICC at www.iccsafe.org or (800) 786-4452.

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San Anselmo News

Debra Stutsman, Town Manager
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December 21, 2007

Marin Emergency Automated Notification System

The Marin Emergency Automated Notification System (MEANS) is a countywide communication network that provides notification to **business owners** in the event of an emergency. MEANS uses high speed notification technology to quickly communicate with a specific group of people.

The San Anselmo Police Department utilizes MEANS to notify **businesses** in the event of an emergency. San Anselmo is broken down into four emergency zones or business group areas;

- Red Hill businesses
- San Anselmo flood area which would be downtown businesses
- San Anselmo non-flood businesses
- Red Hill Shopping Center

Activating the system can be done in just a few minutes. Once activated, notification to the businesses will begin within fifteen minutes and can be made to any or all of the business groups depending upon where the emergency is occurring.

Currently, we have nearly 400 business entries in our database with additional entries being made on a regular basis.

We want to make sure that the information we have on our businesses is current, accurate, and includes the work number, cell number and home number, at the very least. We can tell the system in what order we want the numbers to be dialed. For example, if the emergency occurs in the daytime, we would set the system to dial work numbers first, cell numbers second, and home numbers third. If an event occurs in the middle of the night, we would set the system to dial the home number first, the cell number second and the work number third.

Businesses who have not yet given us their emergency phone information, or who wish to update their information, may go to the Town's website at www.townofsananselmo.org and click on Merchant Emergency Contact Information. The form is also available at the Police Department 7 days a week, between 7 a.m. and 7 p.m.

Telephone Emergency Notification System

The Telephone Emergency Notification System (TENS) is another countywide communication system for emergency notification. TENS is a high speed phone system that can deliver numerous emergency phone calls simultaneously to affected **residents**.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

The phone numbers that are called in the TENS system during any kind of emergency are obtained through the same technology as the 911 emergency calling system. **As such, there is no need to sign up for the TENS system.** If you have a landline phone in your home or business, you are in the system.

If you are a San Anselmo resident and do not have a landline (a dedicated phone line hardwired to your home), you can be included in special residents' group in the MEANS notification system by going to www.townofsananselmo.org and clicking on the Resident Emergency Contact Information link. We will need your name, address and one cell or internet-based phone number. You may also call the Police Department at 258-4610 to give us this information. At this point, the system is only capable of accepting one number per household.

Sand and Bags

The winter storm season is upon us and, Town staff would like to remind you of the emergency measures that are in place:

- Sand and sandbags are available at the dead end portion of Sunny Hills Drive, by the tennis courts and behind Round Table Pizza. Bring your own shovel. Sand bags are **not** available at the Town's Corporation Yard.
- In the event of heavy predicted rainfall with a threat of small stream flooding, the Telephone Emergency Notification System (TENS) and the Marin Emergency Automated Notification Systems (MEANS) will be activated, warning residents and merchants in flood-prone areas of the approaching storms and advising them to stay tuned to local TV and radio stations for periodic updates.
- If flooding is imminent, Town staff will sound the flood alarm, 5 blasts, a pause, 5 blasts, a pause, and five more blasts. When the flood horn is sounded, people in areas that flood should proceed to higher ground and should not attempt to enter flooded areas.

The Town brochure "Winter Preparedness Tips" is available at Town Hall and at the Police Station, 525 San Anselmo Avenue. The information can also be found on the web page at <http://www.townofsananselmo.org/flood/index.htm>.

December dates to remember:

Monday, December 24, 2007 – Tuesday, January 1, 2008 – Town Hall offices and the Library closed for the holidays.

Tuesday, December 25, 2007 – The regular Town Council meeting is cancelled.

Thursday and Friday, December 27 and 28, 2007 – Building inspections available.

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TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



San Anselmo News

Debra Stutsman, Town Manager
dstutsman@ci.san-anselmo.ca.us

December 14, 2007

Town Council News

At the Town Council meeting of December 11, the Town's newly elected officials were sworn into office. Congratulations to Barbara Thornton and Ford Greene, Town Councilmembers; Bess Niemcewicz, Town Treasurer; and Barbara Chambers, Town Clerk.

The Council thanked outgoing Mayor Wayne Cooper for his leadership during the Town's Centennial year. In addition, outgoing Treasurer Roberta Robinson was thanked for her dedication and service to the town.

The newly-seated Council then voted unanimously to elect Ted Freeman the Town's mayor for 2008. Peter Breen was elected to serve as Vice-Mayor. Congratulations Ted and Peter!

With all that accomplished, the Council got down to business. Following are the highlights of actions taken at the meeting:

- Accepted with great thanks the generous donation of \$143,000 from the Friends of the Library and the Save Our Library fundraising group to fund additional Library hours.
- Approved a resolution adopting a goal of zero waste by 2025.
- Cancelled the regular Town Council meeting scheduled for December 25, 2007, due to the holiday.
- Directed staff to schedule a workshop to discuss in depth the proposal to limit the size of homes based on a combination of floor area ratio and lot coverage.
- Continued to January 8, 2008, an appeal of Planning Commission approval of a new 3,784 square foot single family dwelling at 48 Raymond.
- Introduced an ordinance adding a maximum time limit of four hours to the parking meter zones, in preparation for reconfiguring the Creek Park parking lot meters to four hour metered parking.
- Adjourned in memory of retired Ross Valley Fire Captain Edward Kelly, Town resident Charles Brown and former Councilmember Kenneth Anderson.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Flood Committee News

At its meeting of Monday, December 10, the Flood Committee heard a report on the creek monitoring system that is now installed in San Anselmo creek at Bridge Street, across the street from the downtown fire station.

The system is presently recording the water level of the creek and sending data at a predetermined frequency to a computer in the fire station. When the creek rises to certain levels, Town officials are automatically notified. When creek levels rise to even higher levels, residents and merchants in the flood zone will receive calls via the automatic phone alert system with a recorded message outlining what steps to take. When flooding is imminent, the Town's emergency horn will be sounded, alerting citizens to get to high ground.

As the winter season progresses, Town officials and Flood Committee members will be working with the rainfall and creek level data collected, making adjustments to the alert criteria, to ensure that the alert system is working at maximum efficiency.

The intent of the system is to provide as much warning as possible to the public to ensure life safety and the protection of personal property. Please be patient as we work to fully optimize the system, as it will take some time to observe the creek flow and rainfall levels and fully optimize the intermediate alarm points.

Within the next month, creek water elevations will be available for viewing on the Ross Valley Fire Department website.

Emergency Flood Horn

The emergency flood horn located in the Town Hall Tower is tested **every Friday at noon**. The test consists of one blast of the horn. In the event of a real emergency, the horn will be sounded with five blasts, a pause, five blasts, a pause, and five more blasts.

December dates to remember:

Monday, December 24, 2007 – Tuesday, January 1, 2008 – Town Hall offices and the Library closed for the holidays.

Tuesday, December 25, 2007 – The regular Town Council meeting is cancelled.

Tuesday and Wednesday, December 27 and 28, 2007 – Building inspections available.

San Anselmo News, published weekly on Fridays, available at San Anselmo Town Hall, Library, on the Public Notice Bulletin Board, and in the Ross Valley Reporter. Also available on the Town's website, www.townofsananselmo.org, and by email subscription. To subscribe to the email list, send an email to townclerk@ci.san-anselmo.ca.us.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

*Mitigation
Debbie
Strategies*

Jack H. Olive
707 Sir Francis Drake Boulevard
San Anselmo, CA 94960
jackoliv@pacbell.net
415-458-5813

February 17, 2006

Peter Breen, Councilmember
City Hall
San Anselmo, CA, 94960

Dear Peter:

San Anselmo need not live in the fear of another catastrophic flood. Flood protection will require many steps, some money and, most of all, dedication by many residents, business people, the Town government and other cities and governmental entities.

Toward this goal I offer the following ideas. They derive from my observations as a homeowner who borders the creek, a co-owner with my wife of Roger Barber Company which went under in the 1982 flood, and a resident and property owner of the Town where my children, their husbands and my grandchildren and many friends live and work.

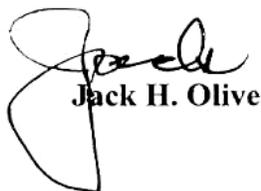
1. Terrace and plant the hillsides of the watershed. This flood differed from the 82 flood. My back deck and street (7 Agatha) both went under water in both floods. Fortunately, there was no damage this time and little in 1982. However this time there was much more silt on both the deck and the street. Both the hillsides, many creek banks and some flooded areas contributed tons of erosion silt. Some terraces could be built to hold and slow the rain. Trees, plants and grasses could be planted to hold the ground and slow the water's speed and erosion.
2. Cuts for roads and buildings should require better engineering and plantings. Every property owner should act both to avoid landslide damage and to slow the next deluge. The various planning authorities should recognize this danger in plan approvals.
3. Creek banks need well engineered retaining walls. As an example, my mother in law lived on Hawthorne Court in Fairfax for many years. I hired Val Schaff, an excellent engineer, to design a wall which I had built. The high water never endangered her house. However the adjoining downstream property had no wall and tons of the soft silt soil later went down the creek. Val also designed my creek bank about 40 years ago and it has held since then.
4. Some better storm systems should be considered. The Corps of Engineers plan as exemplified by the structures in Ross and Kentfield are not

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

appropriate for Ross, San Anselmo and Fairfax. My residence backs onto the creek as the second property below the Saunders Street Bridge. I enjoy the amenity of our back deck on the creek. It has privacy and the herons, kingfishers and small fish add to the pleasure of a place to sit and read. I will welcome restoring the creek for spawning Steelhead. Having a creek that is clean and supports the native Steelhead will benefit every creekside resident. The Friends of Corte Madera Creek Watershed has devoted much time, money and professional research to this goal and they should be part of planning for the creek. Flooding points have been the Saunders bridge, the Bridge Street bridge, the Downtown buildings over the creek, the Lagunitas Street bridge in Ross, and the upstream bridges. They turn the water into the side streets including downtown Fairfax, San Anselmo and Ross. A concrete lined creek would ruin the creek's amenities and probably just cause damage down stream. I suggest some combination of storm drains. From the material I have read the problem is inability to move more cubic feet per second than the creek banks can carry. The creek meanders through San Anselmo. At flood season it crashes into first one side and then the other. Slow and obstructed flow prevent enough water from getting under the bridges. Floods result. I suggest an underground very large enclosed storm drain from somewhere above downtown Fairfax and extending through San Anselmo and Ross to the existing concrete lined creek in lower Ross. Much of it could be alongside Center Boulevard which would require less removal of structures and utilities. It should be closed except for the short periods when catastrophic rainfall is predicted. (the 1955, 1982 and 2005 floods have all been between Christmas day and January 5.) The engineering would require more knowledge of the watershed, more imagination and more money than the Corps of Engineers has had in the past. This years flood damage may make it more economical than recurring floods.

Good luck in getting getting consideration of our flood problem in the right places and among the towns and businesses affected.

Yours truly,


Jack H. Olive

ANECDOTAL INFORMATION

17 Morningside Drive, San Anselmo, CA 94960

Mr. Richard Stutsman met with Mr. Todd Lando on the morning of May 21, 2006 to discuss his comments at the Ross Valley Watershed Community Workshop on May 20, 2006, with respect to flooding on Morningside Drive in San Anselmo.

Mr. Lando lives at 17 Morningside Drive and was present during the 2006 New Years flood when his house flooded with 4 feet of water. He stated that he has a video of the flooding that occurred in his neighborhood that morning. He said that he would make a copy the video on a CD and provide it to Mr. Stutsman.

Mr. Lando stated that the water overtopped the bridge on Morningside between Brookside Drive and Meadowcroft. This bridge has chain link fencing on each side of the bridge for safety protection against access into the creek. The fence is extensively covered with ivy, which acted like a dam when the creek overtopped on the upstream side. As the water exceeded the creek bank, it flowed around the sides of the fencing and flowed down Morningside drive towards Broadmoor. This is a area of lower elevation by at least 4 feet. He stated that eventually, the water exceeded the height of the fence, which was about 4 feet in height. He stated that the water level on the downstream side of the bridge culvert was below the crown of the culvert opening.

Mr. Lando stated that all of the homes along Morningside (No. 9 through No. 31 and then to Sir Francis Drake between 1374 and 1380 Sir Francis Drake Blvd) have an approximate 6-8 foot height fence behind their homes. The water overflowing the bridge at Morningside flooded each of these homes, which are on the lower elevation side of Morningside (Sir Francis Drake Blvd. is at a higher elevation). The reference fence, behind each of these homes, acted as a dam with the water building up against them to approximately 4 feet (see attached photos). The fence at Mr. Lando's home, as well as several others, withstood the 4 feet of water pressure. However, the fence behind his neighbor's house at 21 eventually failed and released the dammed water. At that point the water in his yard and the surrounding area dropped to a level of 1 to 2 feet. He stated that prior to the fence failure, the water in the Morningside area was standing pond, with out any noticeable flow patterns. Once it failed, he stated that the water level dropped and that there were standing waves in the flowing water though his rear neighbors of Mountain View. Reports are that there was little water in those neighbors yards prior to the fence failure, but this needs to be investigated further. These neighbors were not home the weekend of this visit.

The Morningside area appears to be a bowl, with only several small drainage systems (catch basin at 13 – 14 Morningside) to drain normal water inflow. Mr. Lando stated that they have been sufficient for normal rain runoff, were not sufficient for the volumes from the overflowing creek.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Morningside Drive Area

Five storm drains typically start to back-up whenever CM creek is running a capacity. At capacity means the creek is flowing within one foot of the top of the bridge road at 9 Morningside. The drains that back up are below and start to back-up pretty much in the order presented:

1. Drain in front of 33 and 35 Morningside.
2. Drain directly across the street from 33 and 35 (or 32 Morningside).
3. Drain at the end of Meadowcroft Court (private court provides access to homeowners garages for 11 homes that circle Morningside and Meadowcroft)
4. Drain directly across the street at 28 Morningside.
5. Drain in front of 17 and 19 Morningside.

It appears the drain in front of 17 and 19 is the main drain for this area that feeds into the creek at some point. Where it feeds into the creek is not exactly known (by the writer). It may feed into another drain system in the immediate area. There is a large drain entry into the creek where CM creek turns 90 degrees toward SFDrake past Mountain View, so this could be the entry point for the entire area.

Whenever CM creek approaches or exceeds capacity, its first point of overflow appears to the bridge road at 9 Morningside. The water hits the top of the bridge and begins to flow over the top and two storm drain holes that are on the bridge road that drop right into the creek. This section of the creek is also relatively narrow compared with sections above and below the Morningside bridge. So, not only is water flow restricted by the bridge height, it is also restricted by the width of the creek and the bridge at 9 Morningside.

In the 2005 episode, the creek started to overflow at the Morningside Bridge as usual and backed-up so that it was also overflowing further upstream at the Broadmoor bridge road – very unusual based on my observations over the past 10 years. The creek also probably overflowed through the properties that line the CM creek between the Morningside and Broadmoor bridge roads, however, I did not specifically observe this but do recall seeing some water emerge onto the streets from those properties.

Short and intermediate term solutions:

1. Raise the height of the Morningside bridge (near #9 Morningside) and widen it – this would allow for better water flow and flow of debris through and under the bridge. Alternatively, remove the road bridge altogether – this actually may be the better solution since it would certainly allow the creek to flow unobstructed at this point and would likely do little to impact traffic flow in the area. A tall foot bridge over the creek could be constructed for walkers.
2. Widen the portion of the creek between the Morningside and Broadmoor where possible. Ensure vegetation is cleaned-up, creek sidewalls are stable and secure, etc.
3. Raise the height of the Broadmoor bridge – this would also allow for better flow of debris through and under the bridge. It is unreasonable to consider removing this bridge altogether since Broadmoor is a transit corridor to the overdeveloped hillsides.
4. Place a concrete barrier along the creek (in back of the properties which butt up against the creek to keep the water contained in the creek during periods of excessive flow.

Submitted by: Mark Vert of the Morningside Drive area.

459-7071

Part 3 - Coordination with Other Agencies

The Town of San Anselmo submitted a measure to its voters, became a part of the Marin County Flood Control and Water Conservation District, and is subsequently participating in the Ross Valley Flood Control Zone 9 effort.

Ross Valley Flood Control

Community Approves New Storm Drainage Fee



With a count of 3,208 (50.51%) in favor, and 3,143 (49.49%) against, property owners in Ross Valley approved the storm drainage fee. A total of 6,351 ballots were received and validated. You can read the Ballot Notice, Notice to Property Owners, a fact sheet and the Fee Report. [Learn more...](#)

On December 31, 2005, at 3am, a flow of about 763,000 gallons per minute broke creek banks and flooded our streets—during a 100-year storm. Engineers use that term to describe a storm that has a 1% chance of occurring in any given year, not a storm that occurs only once in 100 years. In fact, Ross Valley has experienced three 100-year storms in the past few decades (1982, 1986, and 2006). Much of the Ross Valley storm drainage system currently provides about 5-year protection, meaning that it can be overwhelmed by a storm that has a 20% chance of occurring in any given year.

Engineers have now identified first-phase flood protection solutions for the Ross Valley that could contain a flood of last year's magnitude. Removing constrictions that block creeks could quadruple flood protection, and contain floods during 20-25 year storms (those with a 4-5% chance of occurring). Adding detention basins upstream, to hold water and release it slowly, could provide 100-year flood protection.

Projects can only be undertaken with sufficient funding, which will come from local, State and Federal sources. Property owners may soon be asked to vote on a storm drainage fee to help fund the Ross Valley Flood Protection and Watershed Program. The County has sent notices to all property owners to advise them of a Public Hearing on the vote, scheduled for May 1, 2007.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

About the Flood Protection and Watershed Program

The flooding Ross Valley experienced last winter occurred during a 100-year storm. Engineers use that term to describe a storm that has a 1% chance of occurring in any given year (not a storm that occurs only once in 100 years). In fact, Ross Valley has experienced three 100-year storms in the past decades (1982, 1986 and 2006).

Engineers have started identifying the locations where protection solutions will be most effective. Initial estimates put costs in the \$100 million range. Removing constrictions that block creeks could increase flood protection. Adding detention basins upstream to hold water during a large storm and release it slowly afterwards, could provide 100-year flood protection.

Projects will be designed to:

- Conform to the FEMA Community Rating System, which could reduce flood insurance premiums up to 40% over time
- Reduce damage due to flooding
- Offer protection solutions for homes and business in the prime floodway
- Aid homeowners in the process of repairing stream banks on their property
- Remove bottlenecks that impede water flow
- Improve fish passage
- Maintain natural creek functions
- Reduce pollutants entering the Bay
- Incorporate habitat enhancements

All projects will go through a public review process and comply with all environmental requirements.

Phase 1 Locations

Increasing flow capacity at these locations, plus upstream detention basins that hold storm water and release it slowly, could contain a flood of last year's magnitude.

- Redesign/replace fish ladder at Lagunitas Bridge
- Replace/enlarge Lagunitas Road Bridge (in design phase)
- Madrone Avenue Bridge
- Building Bridge #2 (private property in San Anselmo)
- Downtown Fairfax culvert
- Nokomis Avenue Bridge
- Sycamore Avenue Bridge
- Building Bridge #3 (private property in San Anselmo)

This is the first phase of solutions. With additional funding, engineers will continue to analyze creek constrictions farther in to Fairfax, Sleepy Hollow Creek and other tributaries. In addition, large sections of Corte Madera Creek in Larkspur require dredging to ensure water quickly reaches the Bay. The full Ross Valley Flood Protection and Watershed program will consist of five major elements: Capital projects, operations and maintenance, environmental preservation and restoration, financing, and program administration.



County of Marin
Department of Public Works
P.O. Box 4186
San Rafael, CA 94913-4186

Dear Ross Valley Resident and Property Owner,

The Marin County Flood Control & Water Conservation District has called an election for Zone 9 on an annual storm drainage fee to help fund a Ross Valley Flood Protection and Watershed Program. The proposed fee you will be asked to pay is shown on your enclosed ballot.

Proceeds of the fee would be placed in the Flood Control District Zone 9 fund and would be used for the following purposes: capital improvements to repair and replace drainage infrastructure; enhance and establish drainage system and floodway maintenance programs; provide hydraulic modeling and flood forecasting; and environmental and habitat restoration projects to enhance the creek drainage systems.

The fee would begin in the 2007-2008 fiscal year and would remain in effect for twenty years. The fee would be collected and administered in the same manner as regular property taxes.

If a majority of the voters of Marin County Flood Control & Water Conservation District Zone 9 who vote on this measure vote "yes", the drainage fee will be adopted.

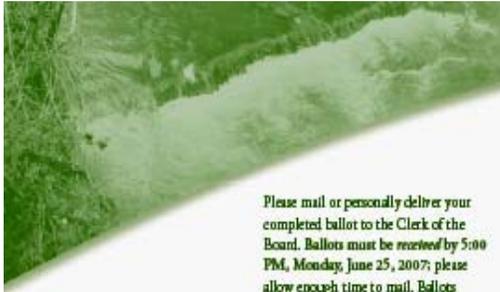
Thank you very much for taking the time to read the information provided here. For more information, please visit the website at www.RossValleyWatershed.org.

Sincerely,

A handwritten signature in black ink, appearing to read 'Farhad Mansourian'.

Farhad Mansourian, Director
County of Marin Department of Public Works

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



NOTICE TO PROPERTY OWNERS and PROPERTY OWNER BALLOT

The County of Marin Flood Control District Zone 9 adopted a resolution on May 1, 2007, authorizing the Clerk of the Board to conduct a Property Owner Mail Ballot vote on a proposed annual watershed-wide, storm drainage fee to fund the Ross Valley Flood Protection and Watershed Program. Hood Zone 9 encompasses the City of Larkspur, the Towns of Ross, San Anselmo and Fairfax, and the unincorporated County areas of Kentfield, Greenbrae, Sleepy Hollow, San Anselmo and Fairfax. The proposed storm drainage fee would be collected on the County of Marin tax roll each year, beginning with tax year 2007-2008.

The California Constitution requires that the proposed storm drainage fee go through a two-step approval process. The first step was the public hearing held on May 1, 2007, and the second step is this property owner vote. To submit the enclosed Property Owner Ballot, please follow the directions on the back of the green ballot.

Please mail or personally deliver your completed ballot to the Clerk of the Board. Ballots must be received by 5:00 PM, Monday, June 25, 2007; please allow enough time to mail. Ballots received after this deadline will not be counted. If you return by mail, use the enclosed postage-paid envelope to mail to:

Clerk of the Board
Marin County Civic Center Room 329
3501 Civic Center Drive
San Rafael, CA 94903

Or hand deliver to the same address during normal business hours.

Calculating the Storm Drainage Fee

In the Ross Valley Watershed, creeks and streams are part of the natural drainage system that sends stormwater runoff to the Bay. A storm drainage fee would be paid by properties that contribute runoff to the storm drainage system and as proposed would result in \$2,164,130 in revenue annually for the Ross Valley Flood Protection and Watershed Program.

The fee for your property is related to the estimated amount of stormwater runoff it generates (your proposed fee is on your ballot). Land that is developed (for example, with a house, commercial building or parking lot) creates "impervious areas" where water cannot soak into the land, resulting in stormwater runoff. A storm drainage

fee would be based both on the size of your property and how heavily it is developed (its impervious percentage).

The majority of single-family residential properties in Ross Valley will pay \$125 or less per year. Virtually all condo owners will pay less than \$30 a year. The fee is capped at \$180 a year for all residential properties and at \$6,000 a year for commercial properties. Adjustments for inflation will be limited to no more than 3 percent a year, as determined by the Board of Supervisors, and the fee will end in 20 years unless it is extended by a vote of property owners. This annual revenue will not be sufficient to fund all aspects of the comprehensive program, which have been estimated to cost at least \$100 million. The Flood Control District will be able to leverage the annual revenue from the proposed fee through state and federal loans and grants to raise the required revenue.

Analysts developed a table that groups properties into the four types of land use given by the County's Assessor's Tax Rolls (i.e., single family residential, condominiums, multi-family buildings and commercial/industrial property) and then into five size categories, with a flat fee for each size category (see tables).

In Ross Valley, the median residential lot is 1.5 acre and is about 31% impervious—the fee would be \$125 annually and all other fees are developed in proportion to that. Larger residential property rates are modified by a lower impervious percentage because they have proportionally more open space. For example, in Ross Valley a 1-acre residential lot is about 16% impervious.

However, large residential parcels still produce more runoff than do small parcels and thus would be charged a higher fee to account for the greater, natural surface, capped at \$180. On the other hand, commercial properties are usually more heavily built on than residential properties. As a result, they have a high impervious factor and would usually be charged a higher fee than would a similar size residential lot. All multi-family and commercial properties over 1 acre will be reviewed individually to determine their impervious factor and fee.

The full storm drainage fee report is available at Clerk of the Board's office and at Department of Public Works offices in Room 304 at the Civic

Center. The report is also available on the project website at www.RossValleyWatershed.org.

Annual Public Hearing to Set the Storm Drainage Fee

Every year, the County of Marin Flood Control District Zone 9 will hold a public hearing to set the storm drainage fee for the following year. The Board can decide to end the fee (for example, if all projects are completed), reduce the fee, or increase the fee, limited to a maximum of 3 percent a year. The fee will end in 20 years.

The Return-by-Mail Ballot Process

In conformance with California law, ballots are mailed to the property owner of record, which is not always the person living in or conducting business in a building on that property (renters do not vote because they don't pay the fee directly). Complete property owner balloting procedures are on file at the Clerk of the Board's office. There is one vote per property and you do not need to be a registered voter to return your ballot. If you own multiple properties, you will receive multiple ballots showing each property's proposed fee. The County of Marin complies with the American with Disabilities Act: If you are a qualified individual with a disability and need assistance with completing or returning the enclosed ballot, please contact the Clerk of the Board at (415) 499-7331. If you wrongly mark or deface your ballot, it will be invalidated, but you can receive another by contacting the Clerk of the Board.

Returned ballots will be kept unopened in the Clerk of the Board's office until 5:00 PM, June 25, 2007. They will be tabulated electronically in the Clerk's office, during normal business hours, following the end of the property owner balloting period on June 25, 2007.

Passage requires a simple majority of returned property owner ballots.

Single Family Residential PROPOSED STORM DRAINAGE FEE

ACRES	ANNUAL FEE	MONTHLY FEE
0 - .15	\$107.69	\$8.97
.151 - .25	\$125	\$10.40
.251 - .50	\$147.84	\$12.32
.501 - 1	\$180	\$15.00
>1	\$180	\$15.00

The majority of single-family residential properties would pay \$125 or less per year; your exact fee is on your ballot.

Commercial/Industrial PROPOSED STORM DRAINAGE FEE

ACRES	ANNUAL FEE	MONTHLY FEE
0 - .15	\$156.36	\$13.03
.151 - .25	\$287.46	\$23.96
.251 - .50	\$645.97	\$53.83
.501 - 1	\$1,141.26	\$95.10
>1	Individual	Individual

Most properties would pay under \$200 a year; your exact fee is on your ballot.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Watch the Third Community Meeting Video



Couldn't make it to the meeting? Click [here](#) to watch a video of the February 10 meeting at Sir Frances Drake High School in San Anselmo. Media coverage by the Marin Independent Journal newspaper can be read [here](#).

New Fact Sheet Available



A new fact sheet was distributed at the third community meeting held on February 10. This document provides an update on the progress made so far, key targeted watershed improvement projects, and an explanation of the proposed storm drainage fee. Click [here](#) to download the latest fact sheet

Flood Preparation Videos



We've added a few helpful videos that share the experience and wisdom of our neighbors in Napa who have developed simple and reliable methods to protect their stores and merchandise.

Watch the 12/31/2005 Flood Video Is Available



Click here to watch a clip of footage taken during the dramatic and devastating flood on December 31, 2005. That flood was a "100 Year Event", making it equally as disastrous as the 1982 Ross Valley flood. (Movie is 17.5 MB, please allow 30-45 seconds to load). [Learn more...](#)

Flood Safety Brochure Now Available



This handy brochure can help you protect your home, business and loved ones from flooding with important information on how best to prepare for the rainy season, and how to react during an emergency. Be prepared - Don't wait until it's too late! [Learn more...](#)

Section II – Risk Assessment

Part 4 - Hazard Assessment

ABAG Disaster Mitigation Annex for the Town of San Anselmo

LHMP Annex Town of San Anselmo

Introduction

The Town of San Anselmo is a small town located in the center of Marin County. The Town has a population of 12,400 people, based on the 2000 census¹. The Town's 2004 – 2005 budget is \$12,121,014. The Town employs 56 people. While the Town provides local police services, the Town's fire services are supplied by a separate fire district.

The Planning Process

This process of preparing this plan was familiar to the Town of San Anselmo. The Town two elements to its General Plan last updated in 1989 that include a discussion of fire, flooding, and other hazards, the Conservation Element and the Land Use Element. In addition, the Town routinely enforces the requirements of the California Environmental Quality Act (CEQA) requirements (which, since 1988, have required mitigation for identified natural hazards). The Town's effort has focused on building on these pre-existing programs and identifying gaps that may lead to disaster vulnerabilities in order to work on ways to address these risks through mitigation.

Many of the activities conducted by the Town were fed into the planning process for the multi-jurisdictional plan. The Town participated in various ABAG workshops and meetings, including the general "kick-off" meeting and other policy meetings and discussions. In addition, the Town has provided written and oral comments on the multi-jurisdictional plan. Finally, the Town provided information on facilities that are viewed as "critical" to ABAG.

Senior Town staff met in 4 separate small group meetings to identify and prioritize mitigation strategies appropriate for the Town. Staff involved in this meetings included the Town Administrator, Planning Director, Building Official, Public Works Director, Street Maintenance Supervisor, Ross Valley Fire Chief, and Police Chief and Police Commanders. At the first meeting, the general priorities and appropriate Town departments were identified. The second and subsequent meetings identified preliminary budgets and potential funding sources for strategies designed as "High" priority. The Town provided the opportunity for the public to comment on the DRAFT mitigation strategies selected by Town staff at the Town Council meeting on March 22, 2005. The resolution adopting the plan and strategies was on the Town Council agenda for May 24, 2005 and was adopted at that time. The mitigation strategies will become an implementation appendix to this Safety Element.

¹ For complete Census information on this Town, see <http://www.bayareacensus.ca.gov/>.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Hazard and Risk Assessment

The ABAG multi-jurisdictional Local Hazard Mitigation Plan, to which this is an Annex, lists nine hazards that impact the Bay Area, five related to earthquakes (faulting, shaking, earthquake-induced landslides, liquefaction, and tsunamis) and four related to weather (flooding, landslides, wildfires, and drought). Except for tsunamis, these hazards also impact this community. Tsunamis do not impact the Town of San Anselmo because of its inland location.

While the Town has undertaken a number of general hazard mapping activities since the General Plan was prepared by the Town, all of these maps are less detailed and are not as current as those shown on the ABAG website at <http://quake.abag.ca.gov/mitigation/>.

The Town has had a number of landslides in the hills on the east side of the Town, including one that destroyed an apartment complex in 1967; two houses were destroyed and one severely damaged by a landslide in the winter of 1997-1998

The Town experiences localized flooding on a yearly basis with some minor damage to residences and businesses in most years. The January, 1982 Winter Storm flooding of the Corte Madera Creek (FEMA 651-DR-CA) caused extensive damage to the downtown commercial district and surrounding residential areas. Ongoing mitigation measures since 1982 have prevented a recurrence of the disastrous flooding by a sometimes narrow margin.

There are no known active earthquake faults within the Town of San Anselmo.

Information on disasters declared in Marin County is at <http://quake.abag.ca.gov/mitigation/disaster-history.html>.

The Town examined the hazard exposure of Town urban land based on the information on ABAG's website at <http://quake.abag.ca.gov/mitigation/pickdbh2.html>. Of the 1,550 urban acres in the Town,

- ◆ 83 acres are in the 100-year flood plain, while an additional 112 acres are in other flood-prone areas;
- ◆ 19 acres are subject to dam inundation;
- ◆ 214 acres are in areas of existing landslides;
- ◆ The California Geological Survey has not completed mapping of earthquake-induced landslide hazards in the Town. However, this hazard is viewed as similar to that posed by weather-related landslide hazards.
- ◆ 475 acres are in areas of moderate or high liquefaction susceptibility;
- ◆ 1,300 acres are in the moderate shaking potential category, 230 acres are in the high shaking potential category;
- ◆ 24 acres are subject to high, very high, or extreme wildfire threat (because of the urban nature of the Town); 1400 acres (over 90% of the Town) are in wildland-urban interface threat areas.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

The Town also examined the hazard exposure of infrastructure based on the information on ABAG's website at <http://quake.abag.ca.gov/mitigation/pickdbh2.html>. Of the 57 miles of roadway in the Town,

- ◆ 4 miles of roadway are in the 100-year flood plain, while an additional 5 miles are in other flood-prone areas;
- ◆ one mile of roadway is in an area subject to dam inundation;
- ◆ 10 miles of roads are in areas of existing landslides;
- ◆ The California Geological Survey has not completed mapping of earthquake-induced landslide hazards in the Town. However, this hazard is viewed as similar to that posed by weather-related landslide hazards.
- ◆ 20 miles of roadway are in areas of moderate or high liquefaction susceptibility;
- ◆ 48 miles of roadway are in moderate or high categories of shaking potential;
- ◆ 2 miles of roadway are subject to high or very high wildfire threat, and 52 miles of roads are in wildland-urban interface threat areas.

Finally, the Town examined the hazard exposure of critical health care facilities, schools, and Town-owned buildings based on the information on ABAG's website at <http://quake.abag.ca.gov/mitigation/pickcrit.html>. Of the critical facilities in the Town,

- ◆ 1 elementary school, 3 Town owned critical facilities and one Town owned bridge are in the 100-year flood plain; additionally, 2 elementary schools, one high school, 1 college, 4 Town owned critical facilities and 8 Town owned bridges are in other flood-prone areas;
- ◆ No critical health care facilities, schools, or Town owned facilities are in an area subject to dam inundation;
- ◆ No critical health care facilities or schools are in areas of existing landslides, one Town-owned facility is in an area of existing landslides;
- ◆ The California Geological Survey has not completed mapping of earthquake-induced landslide hazards in the Town. However, this hazard is viewed as similar to that posed by weather-related landslide hazards.
- ◆ 3 schools, 4 Town owned facilities and 8 Town owned bridges are in areas of moderate, high, or very high liquefaction susceptibility;
- ◆ 5 schools, 7 Town owned critical facilities including Town Hall and the Police Station, and all 9 Town owned bridges are in areas of moderate or high categories of shaking potential;
- ◆ 1 Town owned critical facility is located in an area of high wildfire threat; 1 school, 6 Town owned critical facilities and 8 Town owned bridges are in wildland-urban interface threat areas.

Due to the areas of the Town located in flood-prone areas, there are 3 "repetitive loss properties," as defined by FEMA, in the Town based on the information at <http://quake.abag.ca.gov/mitigation/pickflood.html>.

There are currently no licensed hospitals, long-term care facilities, clinics, home health agencies, or hospices in the Town of San Anselmo. There was a home health agency in the town from 1991 to 2003, but it is now closed.

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Drought, though a potential problem in the Town of San Anselmo, is not fully assessed. The Town will be working with ABAG and the various water supply agencies on this issue.

The Town plans to work with ABAG during 2005 to improve the risk assessment information being compiled by ABAG by providing information on unreinforced masonry buildings and soft-story apartments located in the Town.

The individual impacts of these potential hazards are not fully assessed. The Town of San Anselmo plans to work with ABAG in developing this information as spelled out in ABAG's Annex which states that this will be completed in early 2006.

Finally, while the impacts of these potential hazards are not fully assessed, the Town has reviewed the hazards identified above and ranked them based on past disasters and expected future impacts. The conclusion is that flooding, earthquake (particularly shaking) and wildfire are a higher risk and have greater potential for damage than tsunamis, landslides and drought.

Mitigation Activities and Priorities

As a participant in the ABAG multi-jurisdictional planning process, Town of San Anselmo staff helped in the development and review of the comprehensive list of mitigation strategies in the overall multi-jurisdictional plan. The list was discussed in a series of meetings of the Town Administrator, Police Chief and Police Commanders, Building Official, Public Works Director, Street Maintenance Supervisor, and Planning Director between October 16, 2004 and November 17, 2004. After additional study, the Town Administrator, a Police Commander, the Public Works Director and the Town Building Official held another series of meetings between February 28, 2005 and March 3, 2005. At these meetings, all of the mitigation strategies were reviewed. The tentative decision on priority was made based on a variety of criteria which included whether a strategy was already in place as an existing Town program, and if not, if the strategy was technically and administratively feasible, politically acceptable, socially appropriate, legal, environmentally sound, economically justified, and not harmful to the Town's heritage and character.

Over time, we are committed to developing better hazard and risk information to use in making mitigations strategy decisions based on those trade-offs. We are not trying to create a disaster-proof Town, but a disaster-resistant one.

These draft priorities were submitted to the Town Administrator for review. The draft priorities were then provided to the Town Council on March 22, 2005. The public was provided with an opportunity to comment on the DRAFT priorities. The final strategies (as shown in the attached Table) will become an Implementation Appendix to the Town's Conservation Element.

In addition, the Town examined the hazard exposure information to Town-owned critical facilities supplied by ABAG. The Town has determined that the combination of construction type, age, shaking exposure and flood exposure to the Town's police department, two fire

TOWN OF SAN ANSELMO
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stations, recreation center and corporation yard office are significant. Therefore, the Town plans to apply for Pre-Disaster Mitigation grants to retrofit these critical facilities.

In the Town of San Anselmo, many of the strategies are existing programs already a part of the planning process through Plan and Project Review, building and fire code enforcement, and development of the Town's General Plan. New activities identified, as part of this Annex will be incorporated into these existing mechanisms. Examples include the retrofit or replacement of Town owned critical facilities identified in this plan. Other activities, as described above, will require funds that have not been identified. The City will be working to identify potential funding sources, including capital improvement budgets, bond issues, and federal or state grants

Plan Maintenance and Updating Process

The Town of San Anselmo is committed to reviewing and updating this plan annex at least once every five years, as required by the Disaster Mitigation Act of 2000. The Town Planning Director will contact ABAG four years after this plan is approved to ensure that ABAG plans to undertake the plan update process. If so, the Town again plans to participate in the multi-jurisdictional plan. If ABAG is unwilling or unable to act as the lead agency in the multi-jurisdictional effort, other agencies will be contacted, including Marin County Office of Emergency Services. Counties should then work together to identify another regional forum for developing a multi-jurisdictional plan.

The Town Planning Director will *monitor* this mitigation plan on an on-going basis. In addition, major disasters affecting our community, legal changes, notices from ABAG as the lead agency in this process, and other events will also trigger review of specific parts of the plan. Finally, the Annex will be a discussion item on the agenda of the meeting of Town department heads at least once a year in April. At that meeting, the department heads will focus on *evaluating* the Annex in light of technological and political changes during the past year or other significant events. This group will be responsible for determining if the plan should be updated.

The public will continue to be involved whenever the plan is updated and, as appropriate, during the monitoring and evaluation process. The public will be given notice of, and invited to attend and participate in, those meetings specifically designed to update the Town's plan. All public comments will be reviewed. Publicly initiated changes will be integrated into the plan updates whenever reasonable.

Past occurrences of Bay Area weather-related disasters

Flooding, storms, landslides, droughts, and wildfires have been among the most common disasters in the Bay Area during the period from 1950 to 2000.

- ◆ Extensive flooding and/or landslides occurred in 1950, 1955, 1957, 1958, 1959, 1962, 1963, 1964, 1965, 1966, 1969, 1970, 1973, 1980, 1982, 1983, 1992, 1995, 1996, 1997, and 1998.
- ◆ Large wildfires occurred in 1961, 1962, 1964, 1965, 1970, 1981, 1985, 1988, and 1991.
- ◆ Major droughts were in 1973 and 1976.
- ◆ Freezing conditions caused emergency conditions in 1970, 1972, 1973, and 1990.
- ◆ While dams have failed elsewhere, a dam has never failed in the Bay Area.

See Appendix D and <http://quake.abag.ca.gov/mitigation/disaster-history.html> for more specific information.

Vulnerability of the Bay Area to weather-related disasters

ABAG has focused its assessment of weather-related vulnerability by examining the existing land uses in mapped hazard areas.

Flooding and exposure of existing land use –

- ◆ Of the 4.36 million acres of land in the Bay Area, 9.4% is in the 100-year flood zone, while only 2.1% is in the 500-year flood zone or area of other flooding concern.
- ◆ 8.9 % of the urban land is in the 100-year flood zone, versus 9.6% of the non-urban land.
- ◆ 4.9% of the urban land is in the 500-year flood zone or area of other concern, versus only 1.2% of the non-urban land. The fact that over four times the percentage of urban versus non-urban land is in these areas is because lands protected from 100-year flooding are in these areas of “other flooding concerns.”
- ◆ Types of existing urban land uses with the highest percentages in 100-year flood zones are mixed commercial-industrial complexes (22.7%), urban open space (19.7%), and military use (15.4%).
- ◆ The percentage of urban land located in the 100-year flood zone ranged from a high of 13.9% in Solano County and 12.2% in Marin County to lows of 0% in San Francisco and 4.6% in San Mateo County.

These percentages are based on information in *Table 8: Flooding Hazards and Existing (2000) Land Use*. See Plate 44 and <http://quake.abag.ca.gov/mitigation/pickdbh2.html> for more specific information for individual counties and cities.

Flooding and exposure of existing infrastructure –

- ◆ Rail is disproportionately located in zones subject to 100-year floods, with 19.7% of the miles of track located in these areas.
- ◆ Pipelines, as underground lines, should not be impacted by flooding even though 4.5% of the miles of pipelines in the region are in these areas.
- ◆ While 6.4% of the transit lines are in these areas, this statistic simply points to a need for further assessment on the part of transit operators. For example, underground BART stations are more vulnerable to potential flooding than are elevated track.

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TABLE 8: Flooding Hazards and Existing (2000) Land Use

	Total Acres	Within 100- Year Flood Zone	Within 500-Year Flood Zone or Other Area of Concern	% of Land Within 100- Year Flood Zone	% of Land Within 500- Year Flood Zone or Other Area of Concern
Total	4,395,975	413,595	93,452	9.4%	2.1%
Urban	1,082,285	96,067	52,706	8.9%	4.9%
Non-Urban	3,313,690	317,529	40,746	9.6%	1.2%
URBAN ONLY:					
Residential	578,048	26,016	28,125	4.5%	4.9%
Mixed R+C Commercial/ Services	2,345	195	91	8.3%	3.9%
Mixed C+I	100,396	8,538	6,365	8.5%	6.3%
Industrial	12,137	2,750	1,624	22.7%	13.4%
Military	66,861	9,871	4,148	14.8%	6.2%
Infrastructure	31,409	4,834	53	15.4%	0.2%
Urban Open	146,061	15,320	5,905	10.5%	4.0%
	145,028	28,543	6,396	19.7%	4.4%
URBAN ONLY:					
Alameda	168,564	10,868	9,250	6.4%	5.5%
Contra Costa	192,006	12,820	4,100	6.7%	2.1%
Marin	52,784	6,457	2,893	12.2%	5.5%
Napa	34,826	3,631	475	10.4%	1.4%
San Francisco	29,187	0	0	0.0%	0.0%
San Mateo	103,990	4,816	4,043	4.6%	3.9%
Santa Clara	199,139	22,885	23,636	11.5%	11.9%
Solano	102,317	14,250	4,298	13.9%	4.2%
Sonoma	199,470	20,340	4,011	10.2%	2.0%
	Total Miles	Within 100- Year Flood Zone	Within 500-Year Flood Zone or Other Area of Concern	% of Miles Within 100- Year Flood Zone	% of Miles Within 500- Year Flood Zone or Other Area of Concern
INFRASTRUCTURE:					
Roads	33,995	2,487	1,561	7.3%	4.6%
Transit	173	11	4	6.4%	2.3%
Rail	951	187	56	19.7%	5.9%
Pipelines	32,022	2,288	1,440	7.1%	4.5%
	Total Number	Within 100- Year Flood Zone	Within 500-Year Flood Zone or Other Area of Concern	% Within 100-Year Flood Zone	% Within 500-Year Flood Zone or Other Area of Concern
CRITICAL FACILITIES:					
Health Care	812	33	56	4.1%	6.9%
Schools	2,063	80	121	3.9%	5.9%
Bridges	4,159	697	318	16.8%	7.6%
Local Government	3,991	370	352	9.3%	8.8%

See <http://quake.abag.ca.gov/mitigation/pickdbh2.html> and <http://quake.abag.ca.gov/mitigation/pickcrit.html> for more specific information.

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FLOOD MITIGATION PLAN

The California Office of Emergency Services has compiled two lists of disasters affecting the State, including the San Francisco Bay Area - one for the period from 1950 - 1999, and a second for more recent disasters. The following list of 59 disasters affecting all or part of the nine-county Bay Area during that 57-year period is extracted from those lists (of 188 disasters statewide). All but seven of these disasters are caused by natural hazards, for an average of almost one natural disaster affecting all or part of the San Francisco Bay Area every year.

Summary Table 1950 - 2006

COUNTY	Floods	Weather or Storm	Drought	Wildfires	Energy Shortage	Earthquakes	Agricultural Emergency	Civil Disturbance	Landslide	TOTAL
Alameda	11	5	2	3	2	1	1	1	0	26
Contra Costa	12	6	2	0	2	1	1	1	0	25
Marin	9	7	2	1	2	2	0	0	0	23
Napa	9	7	2	3	0	1	0	0	0	22
San Francisco	4	1	0	0	1	1	0	1	0	8
San Mateo	10	5	2	0	1	1	1	0	1	21
Santa Clara	9	3	2	1	2	2	2	0	0	21
Solano	9	6	2	2	0	1	1	0	1	22
Sonoma	8	9	2	2	1	0	0	0	0	22
TOTAL	81	49	16	12	11	10	6	3	2	

List of Disasters 1950 - 2006

12/55

Floods

Declared: statewide CD 47-DR-CA (12/22/55)

Federal: 12/23/55

74 deaths

Damage: \$200 million

2/58

Storm And Flood Damage

Declared: Northern California (Southern boundaries of Santa Cruz, Santa Clara, Stanislaus, Tuolumne, Alpine Counties to the Oregon border) CDO 58-03 (2/26/58)

Federal: not declared

Damage: not available

4/58

Storm and Flood Damage

Declared: statewide (4/2/58)

Federal: 82 (4/4/58)

13 deaths, several injuries

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2/63

Abnormally Heavy and Continuous Rainfall

Declared: Northern California (boundaries of San Luis Obispo, Ventura, Los Angeles, and San Bernardino counties to the Oregon State line) (2/14/64)

Federal: not declared

Damage: not available

2/9/64

Tsunami Caused by March 1964 Earthquake in Alaska

Declared: Marin (9/15/64) (Tax Relief)

Federal: not declared

Damage: not applicable, only costs were for mitigation

Winter '69

1969 Storms

Storms, flooding

Declared: OEP 253-DR-CA Los Angeles, San Luis Obispo (1/23/69), Fresno, Inyo, Riverside, San Bernardino, Santa Barbara, Tulare, Ventura (1/25/69), Amador, El Dorado, Kern, Kings, Madera, Modoc, Mono, Monterey, Orange, Placer, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Tuolumne (1/28/69), Mariposa, Merced (1/29/69), Calaveras, San Benito, Sierra (2/8/69), Contra Costa, Humboldt, Mendocino, Sonoma (2/10/69), Plumas, Tehama, Yuba (2/16/69), Butte, Marin, Yolo (3/12/69)

Federal: 1/26/69

47 dead, 161 injured

Damage: public-\$185 million; private-\$115 million; TOTAL-\$300 million

Winter '70

Northern California Flooding

Heavy Winds, Storms, Flooding

Declared: OEP 283-DR-CA Butte, Colusa, Glenn, Lake, Lassen, Marin, Modoc, Plumas, Shasta, Siskiyou, Tehama, Trinity (1/27/70), Sutter, Yuba (2/3/70), Del Norte (2/10/70), Alameda, El Dorado, Mendocino (3/2/70)

Federal: 2/16/70

Damage: public-\$19,659,078; private-\$7,998,400; TOTAL-\$27,657,478

2Damage: \$11.5 million

1/73

Coastal Flooding

Heavy rains, winds, floods, and tidal action

Declared: OEP 364-DR-CA Marin, San Luis Obispo (1/23/73), City of South San Francisco (San Mateo County 1/30/73), Santa Barbara, Solano (2/8/73), Ventura (2/28/73)

Federal: 2/3/73

Damage: public-\$5,291,350; private-\$12,706,900; TOTAL-\$17,998,250

4/73

Storms and Floods

Declared: City of Pacifica-San Mateo (4/11/73) (Tax Relief)

Federal: not declared

Damage: public-\$450,000; private-\$250,000; TOTAL-\$700,000

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1976

Drought

Declared: Alpine, Calaveras, Colusa, Fresno, Glenn, Madera, Merced, San Diego, San Joaquin, Solano, Stanislaus, Sutter, Tuolumne (2/9/76), Alameda, Butte, Contra Costa, Kings, Los Angeles, Riverside, San Luis Obispo, Tulare, Yolo (2/13/76), Amador, Monterey, Napa, Nevada, San Benito, San Bernardino, Tehama (2/24/76), San Mateo (3/26/76), Marin (7/6/76)

Federal: not declared

Damage: 1976-\$888.5 million; 1977-\$1.775 billion; TOTAL-\$2.664 billion

1979

Gasoline Shortage Emergency

Declared: Alameda, Contra Costa, Los Angeles, Marin, Monterey, Orange, Riverside, San Francisco, San Diego, Santa Clara, Santa Cruz, San Mateo, Ventura, San Bernardino (11/13/79), San Bernardino (amending boundaries 9/29/79), Monterey (7/13/79), San Bernardino (7/13/79), Riverside (6/22/79), San Bernardino (6/7/79), Monterey (6/7/79), Riverside, (amending boundaries 5/18/79), Monterey, Riverside (portion) (5/11/79), San Mateo, Santa Cruz (5/9/79), San Bernardino (portion 5/8/79), Alameda, Contra Costa, Los Angeles, Marin, Sonoma, Orange, Santa Clara, Ventura (5/8/79)

Federal: not declared

Damage: not applicable

1982 Winter Storms

Heavy winds, rain, flooding, and mud slides

Declared: FEMA 651-DR-CA Alameda, Santa Clara, Solano, San Joaquin (1/9/82), Contra Costa, Humboldt, Marin, San Mateo, Santa Cruz, Sonoma (1/5/82)

Federal: 1/7/82

33 dead, 481 injured

Damage: public-\$101.400 million; private-\$172.450 million; TOTAL-\$273.850 million; 256 homes and 41 businesses destroyed, 6259 homes and 1276 businesses damaged.

Winter '82-'83

Winter Storms

Heavy rains, high winds, flooding, levee breaks

Declared: FEMA 682-DR--CA Contra Costa, San Joaquin, Sacramento (12/8/82), Marin, San Mateo, Los Angeles, San Diego (1/27/83), Alameda, Orange, San Benito, Santa Barbara, Santa Clara, Santa Cruz, Shasta, Sonoma, Ventura, Trinity (1/31/83), Colusa, Lake, Mendocino, Monterey, San Luis Obispo, Solano, Yolo (2/7/83), Butte, Glenn, Kern, Kings, San Bernardino, Sutter Tehama, Merced (3/3/83), Del Norte, Fresno, Madera, Napa, Placer, Riverside, Stanislaus, Tulare (3/15/83), Humboldt, Mariposa, Nevada, Yuba (3/21/83)

Federal 2/9/83

Damage: public-\$151,185,870; private-\$158,641,170; agricultural-\$213,789,992; TOTAL-\$523,617,032

2/86 (beginning)

Storms

Rains, winds, flooding, and mud slides

13 deaths, 67 injuries

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FLOOD MITIGATION PLAN

10/89

Loma Prieta Earthquake

7.1M

Declared: FEMA 845-DR-CA Alameda, Monterey, San Benito, San Mateo, Santa Clara, Santa Cruz, San Francisco (10/18/89), Contra Costa, Marin, City of Isleton (10/23/89), City of Tracy, Solano (10/30/89)

Federal: 10/18/89

63 deaths, 3,757 injuries (10/18/89)

Damage: Alameda \$1,479,104,500, Contra Costa \$25 million, Monterey \$108 million, San Benito \$103.55 million, San Francisco \$2 billion, San Mateo \$292,941,001, Santa Clara \$727.7 million, Santa Cruz \$1.526 million, \$500 million to \$1 billion damage in roads and bridges, \$20 million in state government buildings. Total: \$5.9 billion; 23,408 homes damaged, 3,530 businesses damaged, 1,018 homes destroyed, 366 businesses destroyed.

12/90 (beginning)

Freeze

Declared: FEMA 894-DR-CA Santa Cruz (12/28/90), Fresno, Glenn, Imperial, Kern, Mendocino, Monterey, Riverside, San Benito, San Bernardino, San Diego, San Mateo, Santa Barbara, Santa Clara, Solano, Sonoma, Tulare, Ventura (1/11/91), Alameda, Butte, Colusa, Los Angeles, Madera, Marin, Merced, Napa, San Joaquin, San Luis Obispo, Sutter, Yolo, Yuba (1/18/91), Stanislaus, Tehama (2/14/91, beginning 12/19/90)

Federal: 2/11/91

Damage: public buildings-\$2,330,353; utilities-\$1,614,040; crop damage-\$852,385,282; TOTAL-\$856,329,675; 500 broken pipes, affecting 5,400 homes

1/95

Severe Winter Storms

Declared: FEMA 1044-DR-CA Los Angeles, Orange (1/6/95), Humboldt, Lake, Sonoma (1/9/95), Butte, Colusa, Contra Costa, Del Norte, Glenn, Kern, Lassen, Mendocino, Modoc, Monterey, Napa, Placer, Plumas, San Luis Obispo, Santa Barbara, Santa Clara, Santa Cruz, Tehama, Ventura, Yolo, Yuba (1/10/95), Alpine, Amador, Nevada, Riverside, Sacramento, San Bernardino, San Mateo, Shasta, Sutter, Trinity (1/11/95), San Diego (1/13/95), Alameda, Marin (1/14/95), Fresno, Kings (1/17/95), El Dorado (2/15/95), Madera, Solano (2/17/95), Siskiyou (3/14/95)

Federal-1044 (1/13/95)

11 deaths

Damage: public-\$299.6 million; individual-\$128.4 million; businesses \$58.4 million; highways-\$158 million; ag-\$97 million; TOTAL-\$741.4 million; damage to homes: major-1,883; minor-4, 179; destroyed-370.

2/95

Late Winter Storms

Declared: FEMA 1046-DR-CA 57 counties (all except Del Norte).

Federal: 1/10/95

17 deaths

Damage: public property-\$190.6 million; individual-\$122.4 million; business-\$46.9 million; highways-\$79 million; ag-\$651.6 million; TOTAL-approximately \$1.1 billion; damage to homes: major-1,322; minor-2,299; destroyed-267

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12/96 to 1/97

January 1997 Floods

Declared: Alpine, Amador, Butte, Colusa, Del Norte, El Dorado, Glenn, Humboldt, Lake, Lassen, Modoc, Napa, Nevada, Plumas, Sacramento, San Joaquin, Sierra, Siskiyou, Solano, Sonoma, Sutter, Tehama, Trinity, Yuba (1/2/97); Calaveras, Madera, Mono, Monterey, Placer, San Benito, San Luis Obispo, San Mateo, Santa Cruz, Shasta, Stanislaus, Tuolumne, Yolo (1/3/97); Contra Costa, Fresno, Marin, Tulare (1/5/97); Mariposa (1/6/97); Merced, Santa Clara (1/10/97); Alameda, San Francisco (1/19/97); Kings, San Luis Obispo (1/31/97).

Federal: all 48 counties listed above

8 deaths

Damage: \$1.8 billion

Add: 300 square miles of land flooded; 23,000 homes, 2,000 businesses damaged or destroyed.

2/2/98

El Nino

Declared: Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, Fresno, Glenn, Humboldt, Kern, Kings, Lake, Los Angeles, Marin, Mendocino, Merced, Monterey, Napa, Orange, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Ventura, Yolo, Yuba.

Federal: All above except Kings and Siskiyou counties

17 deaths

Damage: \$550 million

12/17/05 - 1/12/06

2005/06 Winter Storms - DR 1628

Declared: Alameda, Contra Costa, Marin, Napa, San Mateo, Solano, Sonoma

Damage: not available at this time

3/29/06-4/16/06

2006 Spring Storms - DR 1644

Declared: Alameda, Marin, Napa, San Mateo, Sonoma

Damage: not available at this time

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Flood Potential

The Flood Mitigation Plan Hazard Assessment is a description of the existing flood hazards and identification of the flood risks. The magnitude of the flood is measured in terms of its “peak” discharge, which is the maximum volume of water (in cubic feet) passing a point on the channel. Floods are usually referred to in terms of their frequency of occurrence, which is related to the discharge; for example the “100 year flood” for a particular channel is the size flood selected by a government agency for planning purposes (usually a 50-year or 100- year) is referred to as the “selected or regulatory flood.”

The Town also examined the hazard exposure of infrastructure based on the information on ABAG’s website at <http://quake.abag.ca.gov/mitigation/pickdbh2.html>. Of the 57 miles of roadway in the Town,

- ◆ 4 miles of roadway are in the 100-year flood plain, while an additional 5 miles are in other flood-prone areas;
- ◆ one mile of roadway is in an area subject to dam inundation;
- ◆ 10 miles of roads are in areas of existing landslides;
- ◆ The California Geological Survey has not completed mapping of earthquake-induced landslide hazards in the Town. However, this hazard is viewed as similar to that posed by weather-related landslide hazards.
- ◆ 20 miles of roadway are in areas of moderate or high liquefaction susceptibility;
- ◆ 48 miles of roadway are in moderate or high categories of shaking potential;
- ◆ 2 miles of roadway are subject to high or very high wildfire threat, and 52 miles of roads are in wildland-urban interface threat areas.

Finally, the Town examined the hazard exposure of critical health care facilities, schools, and Town-owned buildings based on the information on ABAG’s website at <http://quake.abag.ca.gov/mitigation/pickcrit.html>. Of the critical facilities in the Town,

- ◆ 1 elementary school, 3 Town owned critical facilities and one Town owned bridge are in the 100-year flood plain; additionally, 2 elementary schools, one high school, 1 college, 4 Town owned critical facilities and 8 Town owned bridges are in other flood-prone areas;
- ◆ No critical health care facilities, schools, or Town owned facilities are in an area subject to dam inundation;
- ◆ No critical health care facilities or schools are in areas of existing landslides, one Town-owned facility is in an area of existing landslides;
- ◆ The California Geological Survey has not completed mapping of earthquake-induced landslide hazards in the Town. However, this hazard is viewed as similar to that posed by weather-related landslide hazards.
- ◆ 3 schools, 4 Town owned facilities and 8 Town owned bridges are in areas of moderate, high, or very high liquefaction susceptibility;
- ◆ 5 schools, 7 Town owned critical facilities including Town Hall and the Police Station, and all 9 Town owned bridges are in areas of moderate or high categories of shaking potential;
- ◆ 1 Town owned critical facility is located in an area of high wildfire threat; 1 school, 6 Town owned critical facilities and 8 Town owned bridges are in wildland-urban interface threat areas.

Due to the areas of the Town located in flood-prone areas, there are 3 “repetitive loss properties,” as defined by FEMA, in the Town based on the information at <http://quake.abag.ca.gov/mitigation/pickflood.html>.

There are currently no licensed hospitals, long-term care facilities, clinics, home health agencies, or hospices in the Town of San Anselmo. There was a home health agency in the town from 1991 to 2003, but it is now closed.

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FLOOD MITIGATION PLAN

Flooding is a natural occurrence, however once it occurs; personnel will be needed to assist in rescuing any person trapped by flood waters, securing utilities, and controlling traffic. These actions can overtax the Town resulting in requiring mutual aid from outside agencies.

ABAG (Association of Bay Area Governments) Flood Hazard Recommendations

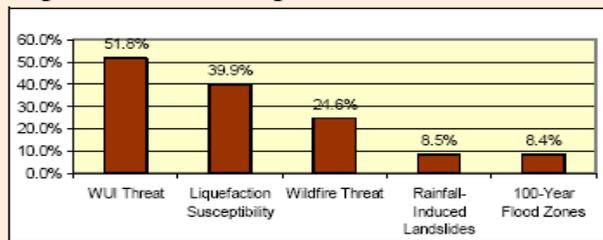
The Bay Area is growing in hazard areas.

From 2000 to 2005, Bay Area added 307,938 people and 116,960 new households. Urban land⁽¹⁾ totaled 1,075,200 acres in 2000. The region added 63,700 acres of new or significantly denser urban development from 2000 to 2005. The Bay Area is projected to continue to grow, adding 1,655,400 more people, 599,240 new households, and 1,603,640 new jobs by 2030 (Source: ABAG's **Projections 2005**).

This growth continues to place increasing pressure on the region to expand urban development, both by increasing the density of areas of existing urban and inner suburban housing, and by the conversion of agricultural and grazing lands to suburban development.

As shown on the following graph, during the period from 2000 to 2005, we continued to build in hazardous areas – in spite of numerous regulations.

Figure: Land Use Change in Hazard Areas – 2000-2005



For example, while 22.3% of the region's land is subject to liquefaction, 39.9% of the land newly developed or redeveloped from 2000-2005 is in these areas. In addition, while 18.5% of the region's land is in a wildland-urban-interface fire threat area, amazingly, 51.8% of the land newly developed or redeveloped from 2000-2005 is in these areas.

(1) Urban land is non-agricultural developed land, that is, residential, commercial, industrial, infrastructure, military, and public/institutional uses.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Flood Area

The Town of San Anselmo

Is a residential community with a population of approximately 13,000 residents. It is located in the upper portion of the Ross Valley on the west side of San Francisco Bay approximately 9 miles north of San Francisco in the southern portion of Marin County. The Town of San Anselmo is bordered on the east by the City of Ross and on the North by the City of San Raphael, on the west by the City of Fairfax and on the south by Marin County.

San Anselmo Creek, which is named Corte Madera Creek when it enters the adjacent City of Ross, originates outside the corporate limits of San Anselmo and flows through the adjacent City of Fairfax prior to entering San Anselmo. Sleepy Hollow Creek is at he major tributary to San Anselmo Creek within the Marin County Flood Insurance Study Area. Sleepy Hollow Creek enters San Anselmo Creek from the North near Sir Francis Drake High School. Sorich, Red Hill, Greenfield and Laurel Drainages join San Anselmo Creek downstream from the Sleepy Hollow Creek Junction. The urbanized portions of Sorich Drainage from Los Angeles Blvd to Sir Francis Drake Boulevard and its tributary, Red Hill Drainage, down stream from Red Hill School are confined to culverts. Downstream from Kemp Avenue in the Laurel Drainage and Floribel Avenue in the drainage along Scenic Avenue are confined to culverts. The entire Greenfield Drainage is confined to culverts.

Laurel, Greenfield, and Red Hill Drainages have been identified as potential sheet flow because they are relatively small streams with their 100 year flows confined to culverts in the flood plain area.

San Anselmo Creek and its tributaries drain almost all of the 2.6 Square miles of the Town, with minor areas draining to the Cities of Ross and San Rafael. Sleepy Hollow Creek and Sorich Drainage drain 25 percent and 10 percent, respectively, of the Town prior to joining San Anselmo Creek.

Drainage basin elevations range from 1800 feet National Geodetic Vertical Datum (NGVD) of 1929 on Pine Mountain to 35 Feet NGVD in San Anselmo.

Residential development exists on the flood plains of San Anselmo and Sleepy Hollow Creeks. Commercial development in the town is concentrated along San Anselmo Avenue between Sycamore Avenue and Bolinas Avenue, along Greenfield Avenue, and along Sir Francis Drake Boulevard from Barber Avenue to Sonoma Avenue, with a major shopping center located between Sonoma Avenue and Arbor Road.

The climate of the area is characterized by warm, dry summers and mild, wet winters. Over 80 percent of the annual precipitation occurs during the period from November through March. The annual average precipitation is 38 inches. The annual mean daily temperature averages 57 degrees F with a maximum of 83 degrees F in July and a minimum of 37degrees F in January.

Vegetation outside the urbanized parts of the Ross Valley Basin includes redwood, fir, oak, madrona and bay trees, and shrub cover consisting of manzanita, shamise and chaparral.

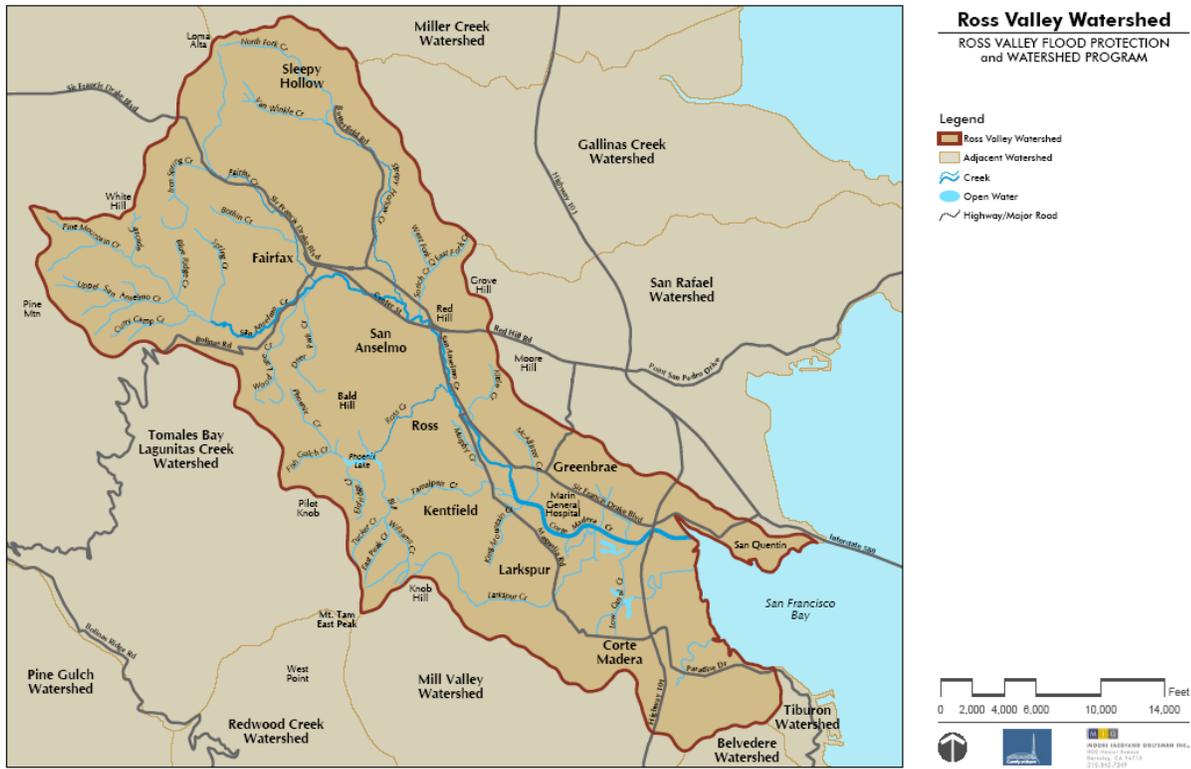
TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Flood History

Prior to the establishment of the U.S. Geological Survey stream gauging station on Corte Madera Creek at Ross, CA, in February 1951, major flooding was reported in 1914, 1925, 1927 and 1942. Since the station has been in operation, major flood flows have been recorded in 1951, 1955, 1958, 1967, 1969, 1969, 1970, 1982, 1996, 2006.

Ross Valley Watershed

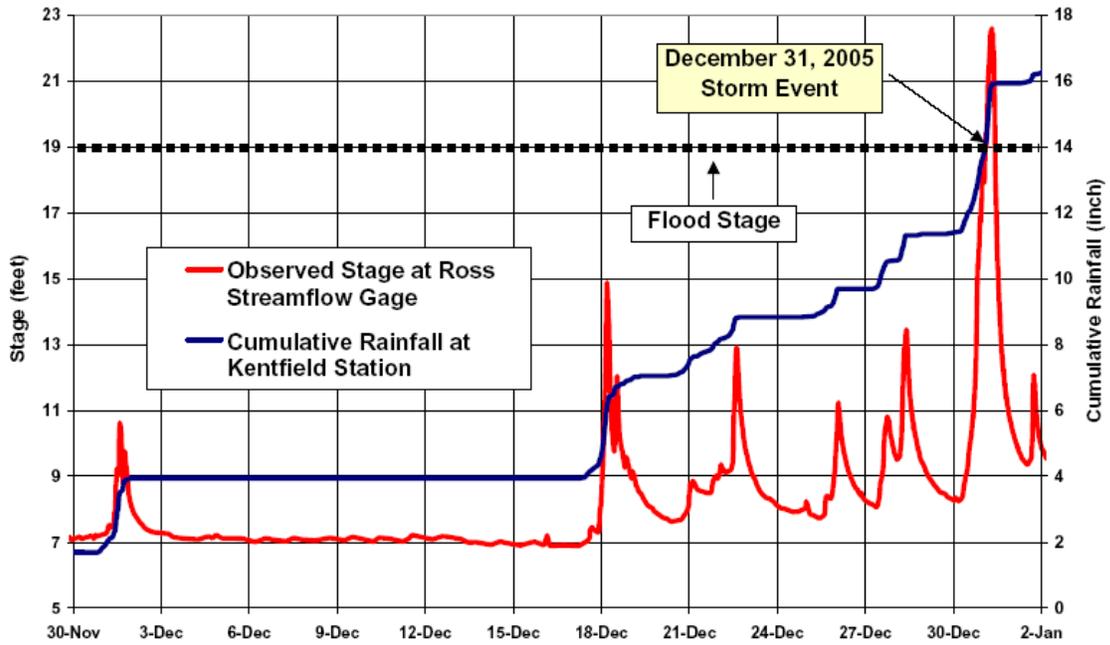
San Anselmo/Corte Madera Creek is the primary drainage channel for the 28 square-mile Ross Valley Watershed.



TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Five Day Hydrograph & Rain Event 2005/06

Seven inches of rain fell on the Ross Valley Watershed in the two weeks prior to the flood. Because of this near-saturated condition, the earth had little or no capacity to absorb storm water on December 31, 2005. In the Ross Valley, creeks rise very quickly in both major and normal storms.

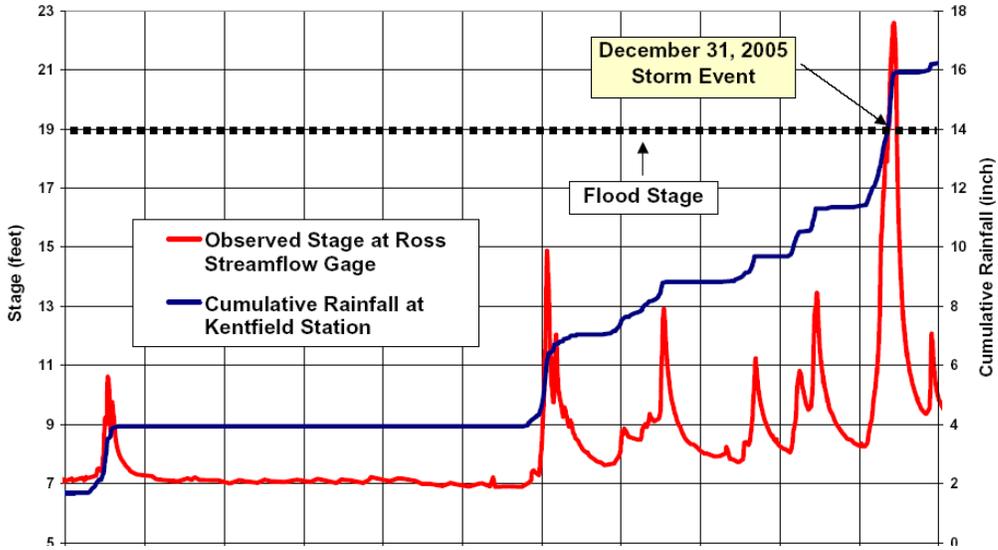


Streamflow Stage at Ross Gage, and Cumulative Rainfall at Kentfield
December 2005

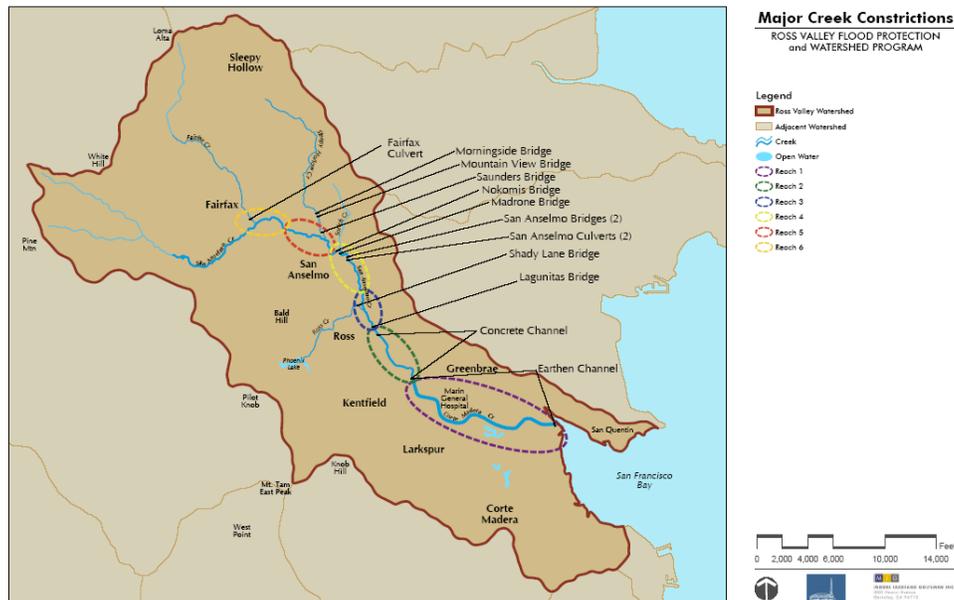
TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

December 2005 Hydrograph & Rainfall

At 2:00 am on December 31, 2005, Corte Madera Creek was already at flood stage of 19 feet. The strongest part of the storm occurred from 3:00 am to 6:00 am. Flood waters topped the banks at Ross and San Anselmo at the same time. The flood crested at 22.5 feet, 3.5 feet above flood stage at Ross.



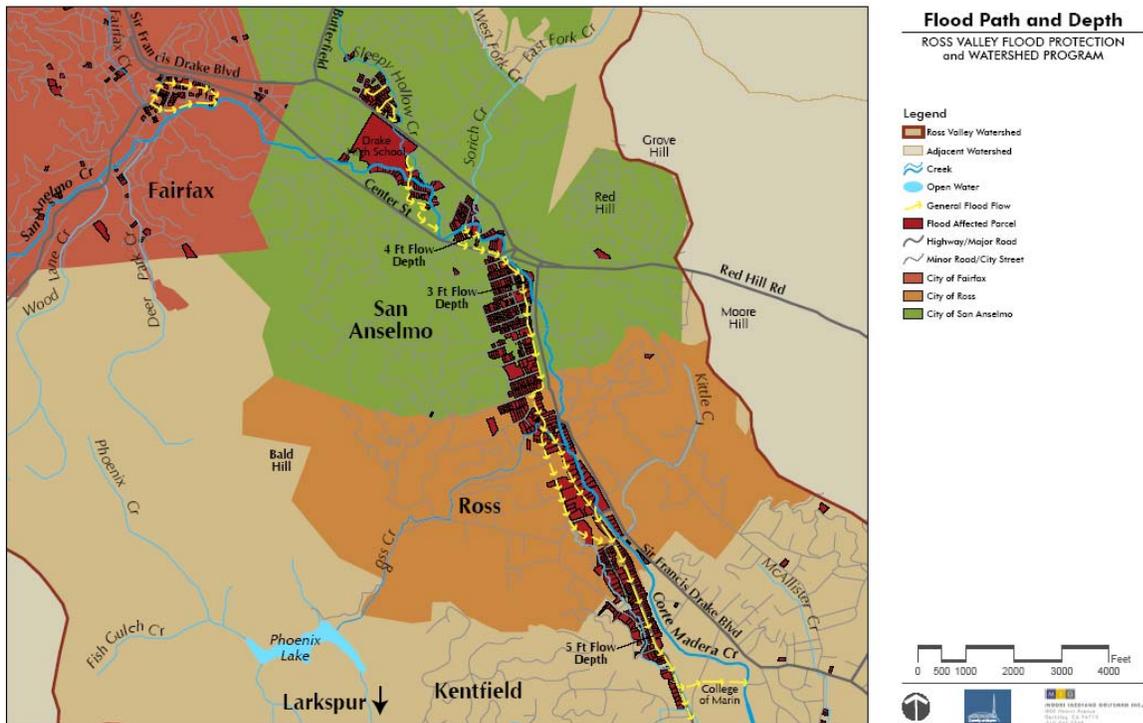
In its preliminary findings, the Ross Valley Technical Working Group (TWG) has identified over a dozen major constrictions in the creek system that cause out-of-channel flows. In most cases, each constriction sends backflow that exacerbates the already reduced capacity upstream. See following



TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Flood Path and Depth (towns/cities)

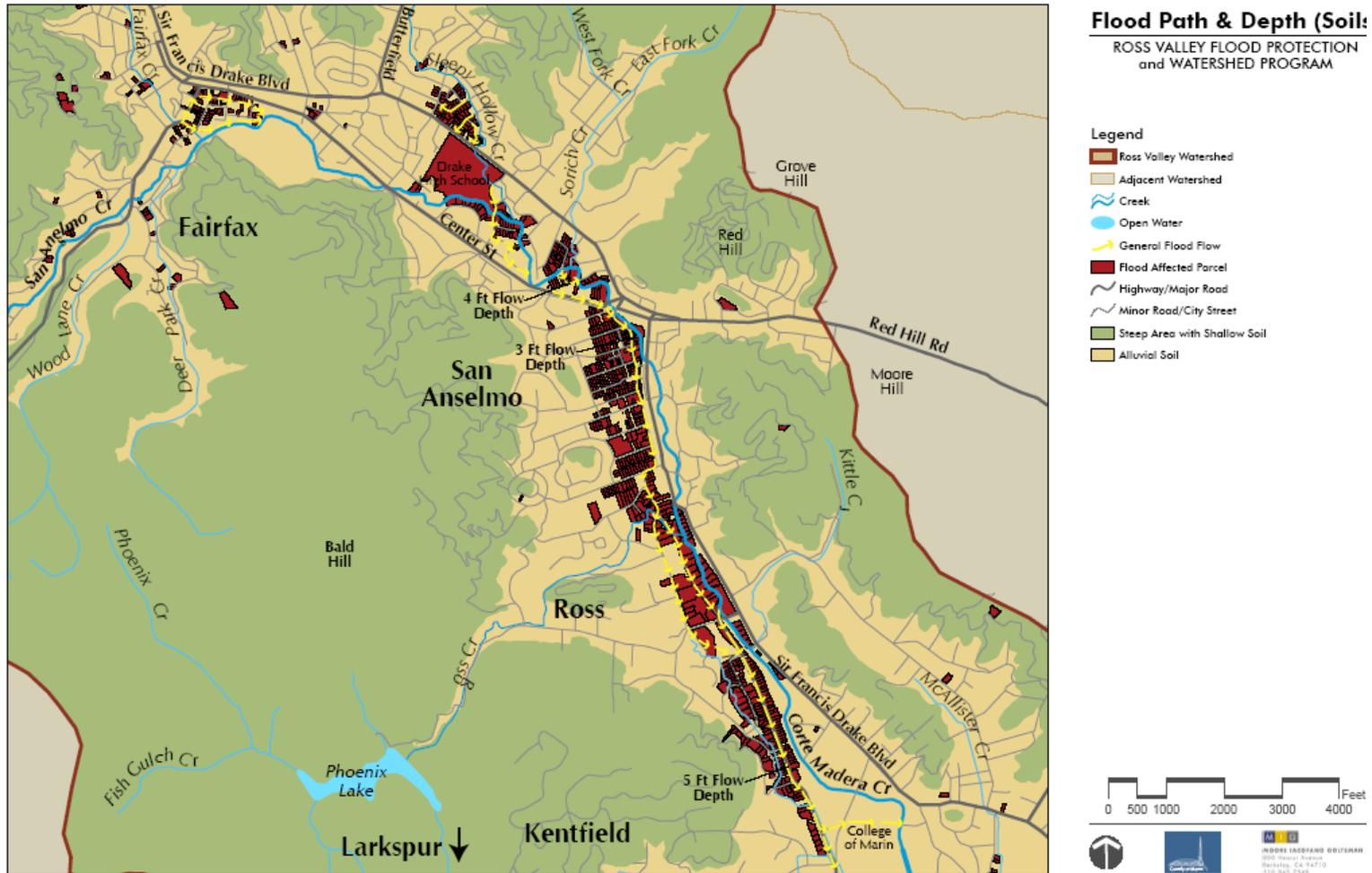
Major flood flows begin upstream, but downstream constrictions force water out of the main channel.



TOWN OF SAN ANSELMO
 FLOOD MITIGATION PLAN

Flood Path and Depth (soils)

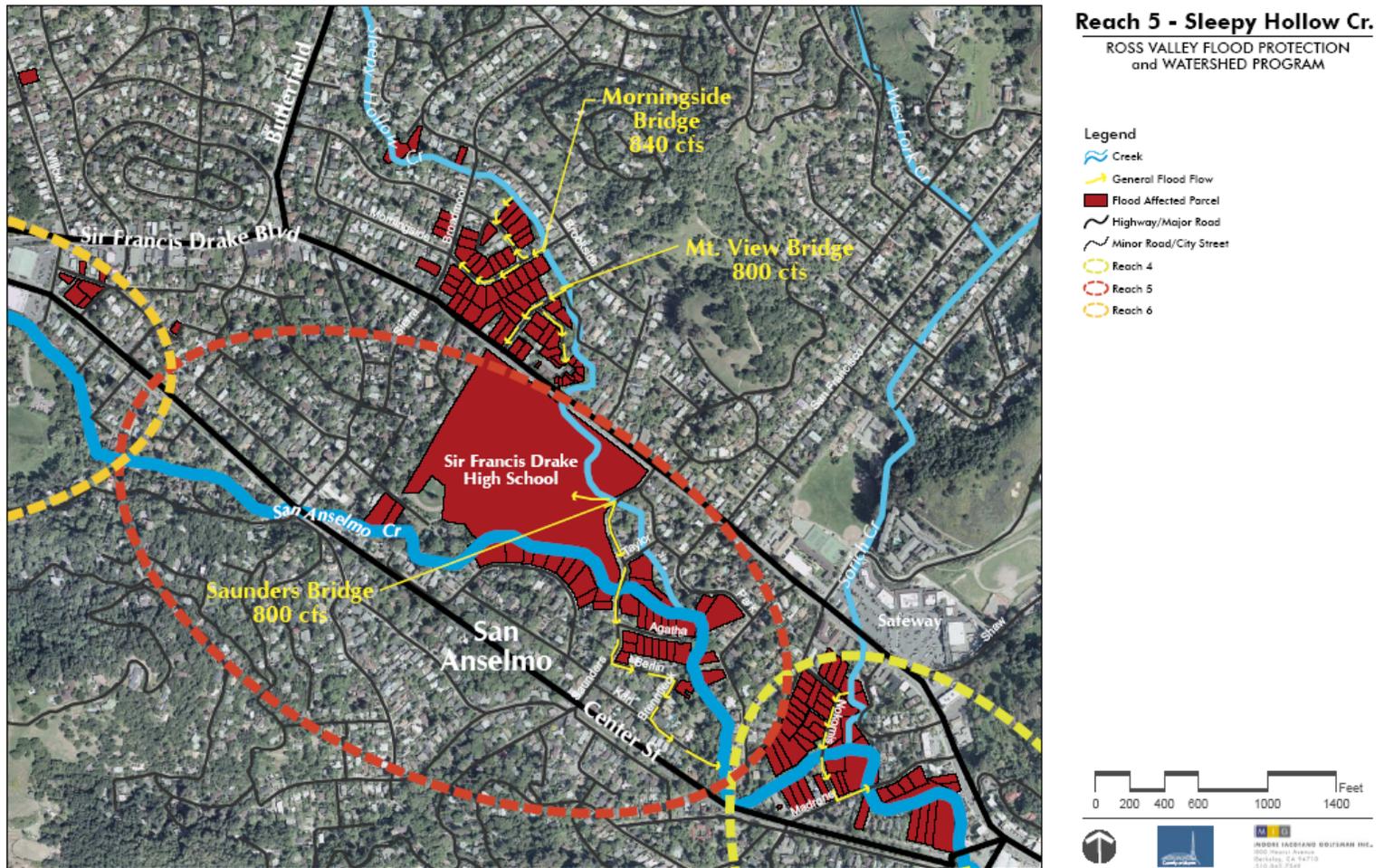
The historic flood plain, indicated by the tan color alluvial soil, far exceeds the extent of the December 31, 2005 flood, indicated by the red flooded parcels.



TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Reach 5 - Sleepy Hollow Creek

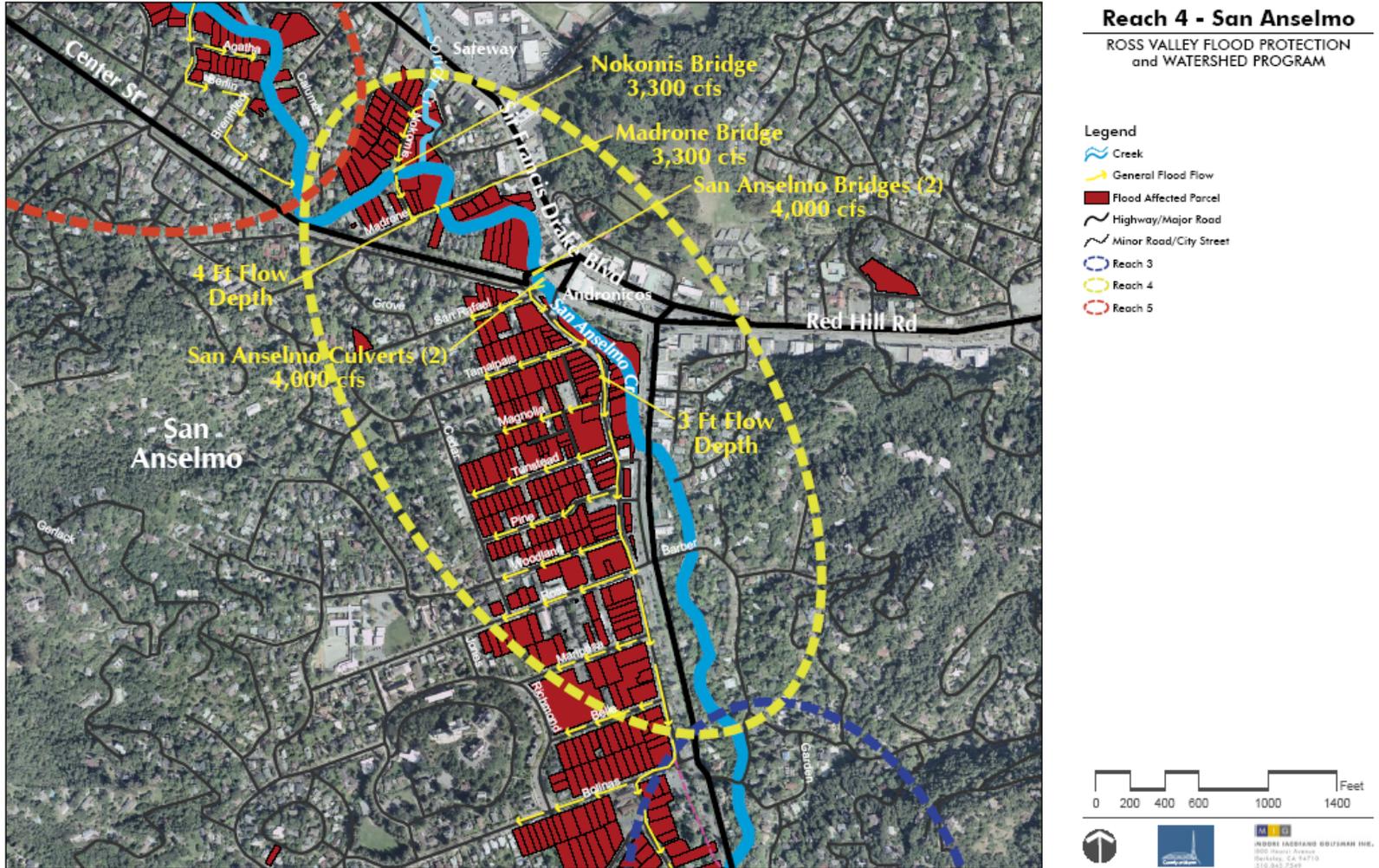
The bridges along Sleepy Hollow Creek restrict the flow down to San Anselmo Creek. This reduced capacity is exacerbated by the constrictions downstream, which back the water up like a traffic jam.



TOWN OF SAN ANSELMO
 FLOOD MITIGATION PLAN

Reach 4 – San Anselmo

Downtown San Anselmo has six major constrictions, four of which are within 500 feet of each other. These severe constraints caused extensive flooding in San Anselmo and downstream in Ross, Kentfield.



TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Repetitive Loss

ABAG Identified Repetitive Loss Properties

JURISDICTION: San Anselmo

COUNTY: Marin

HAZARD: Repetitive Flood Loss

	Total	100-yr Flood Plain (Q3 Zone A or V)	500-yr Flood Plain or Other Concern (Q3 Zone X500)	Outside Flood Plain (Q3 Zone D or X)
Number of properties	3	1	0	2
Number of claims	6	2	0	4
Total claims	\$79,404	\$22,456	\$0	\$56,948
	=====	=====	=====	=====

Source: Association of Bay Area Governments, 2004

Description

The Federal Emergency Management Agency (FEMA) insures properties against flooding losses in the Bay Area through the National Flood Insurance Program. Those properties that have had more than one insured flood loss are called repetitive loss properties and are summarized in this table.

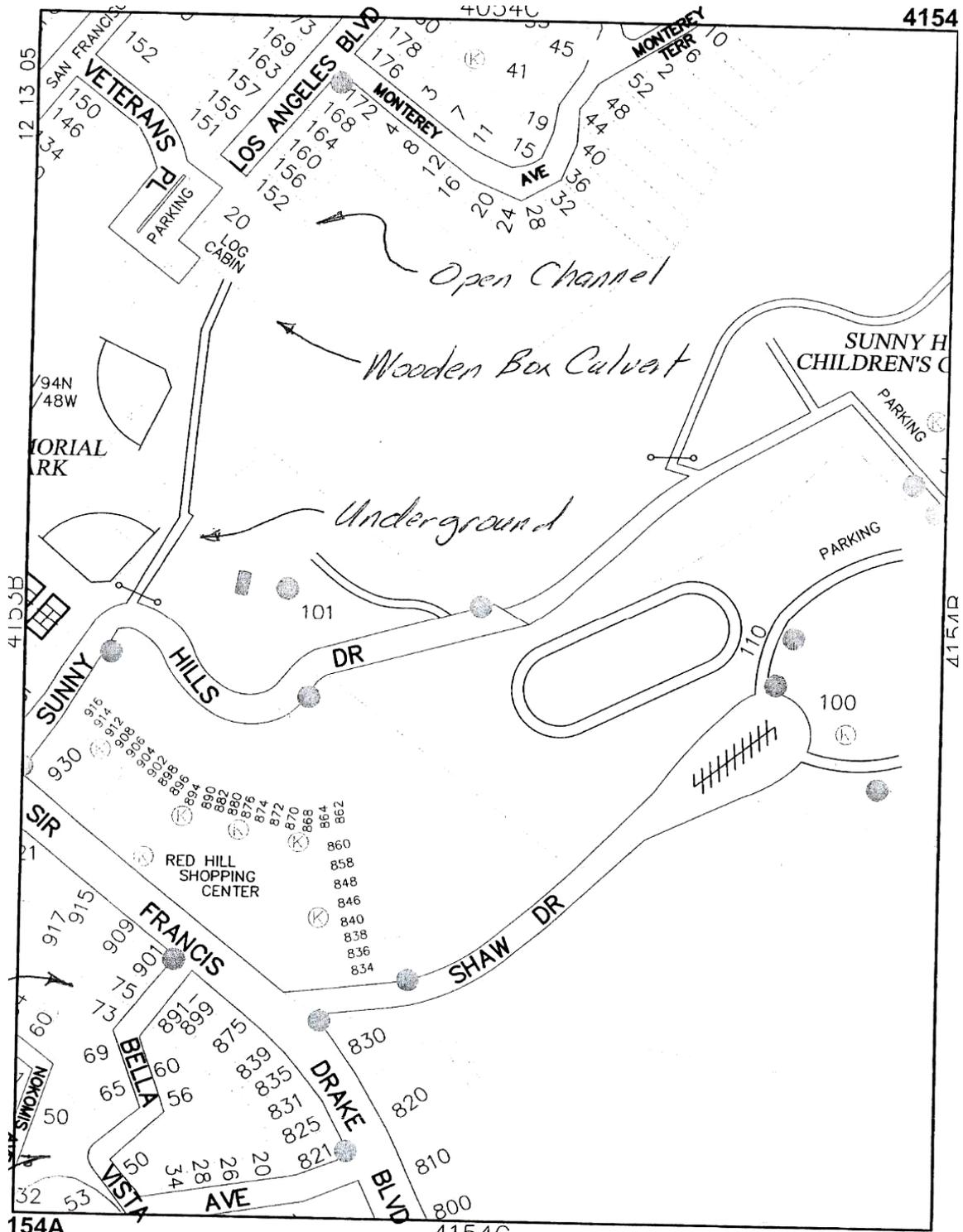
Property need not be located in the SFHA to sustain flood damages. When drainage course or storm drains become clogged, they will backup and overflow causing property damage to even upland structures. (Town of San Anselmo Public Works Department)

Flood was is HIGH PRIORITY HAZARD in the Town of San Anselmo reference: Town of San Anselmo General Plan Safety Element and Town of San Anselmo's Hazard Mitigation Plan

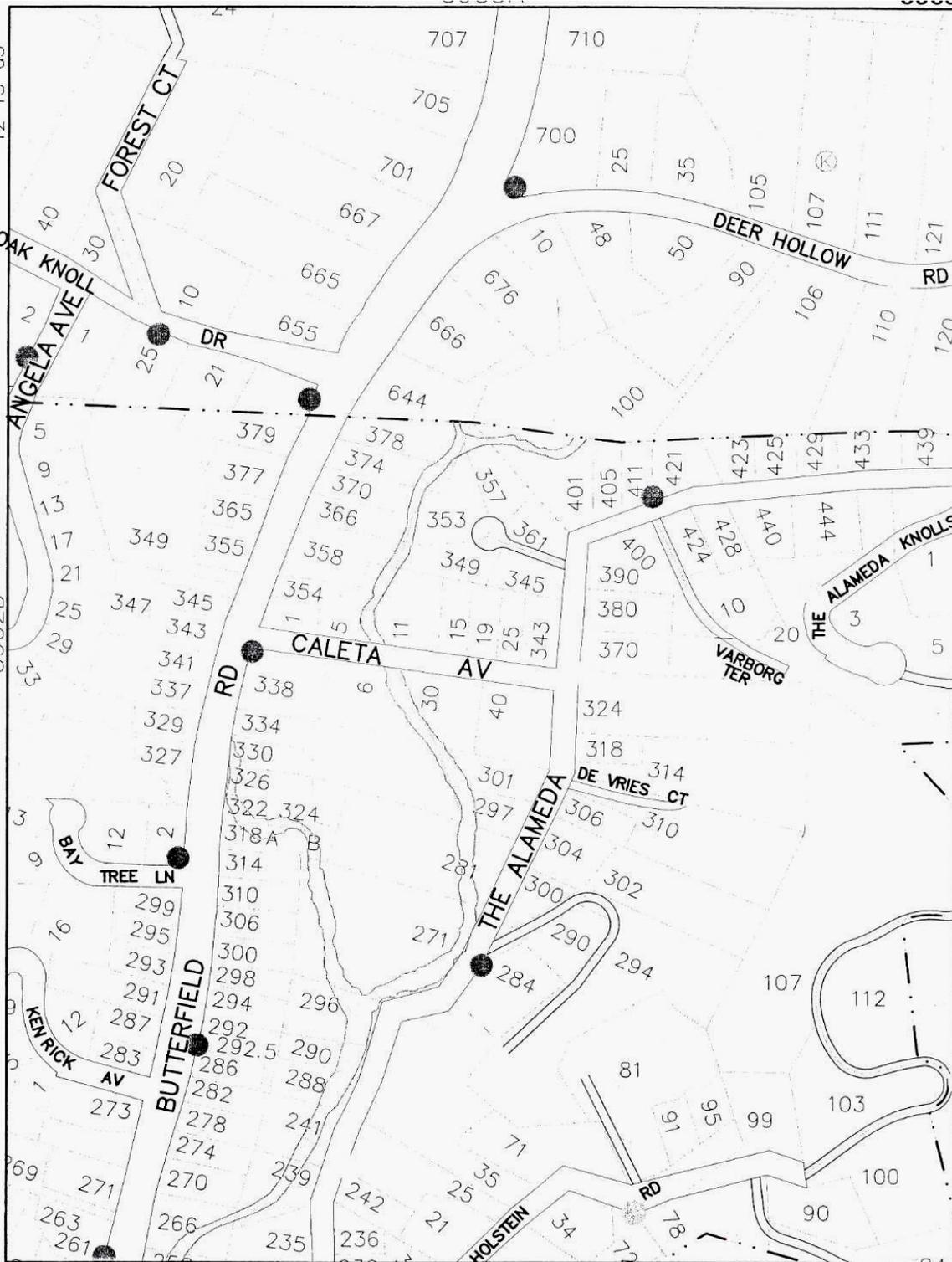
Flooding in Town of San Anselmo has the potential to result in damage to life and property. Rapid storm water and debris runoff can create flood conditions. From the Multi Functional Hazard Plan

A flood may be defined as a temporary rise in stream flow that results in water overtopping its banks and inundating areas adjacent to the channel. The size and frequency of occurrence of a flood depends on a complex combination of conditions, including the amount, intensity, and distribution of rainfall, previous moisture conditions, and drainage pattern floods are generally classified either as slow-rise or flash floods. Moderate rise floods in Town of San Anselmo may be preceded by a warning period of hours or days. Evacuation and sandbagging for Moderate-rise floods may have often extensive damage. Conversely, flash floods are most difficult to prepare for due to extremely limited, if any, advance warning and preparation time. The area subject to inundation is referred to as the "Flood-Plain." The flood-plain is divided into two hazard areas: 1- The "Floodway," which is the portion that carries the deep fast moving water (usually defined as the area needed to contain a 100-year storm) and 2- The flood fringe area which is the remainder of the flood-plain, subject to shallow slow moving water

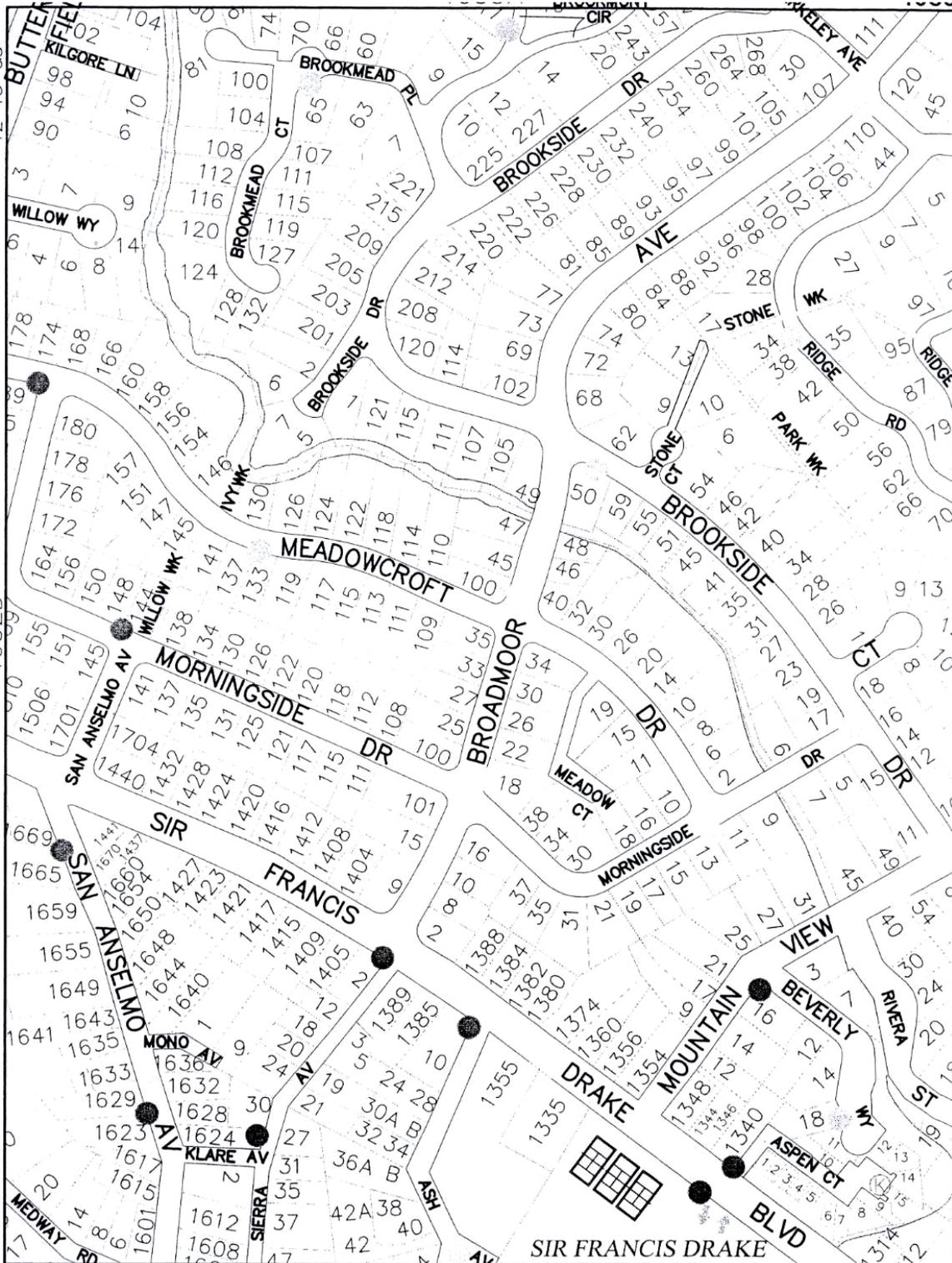
TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



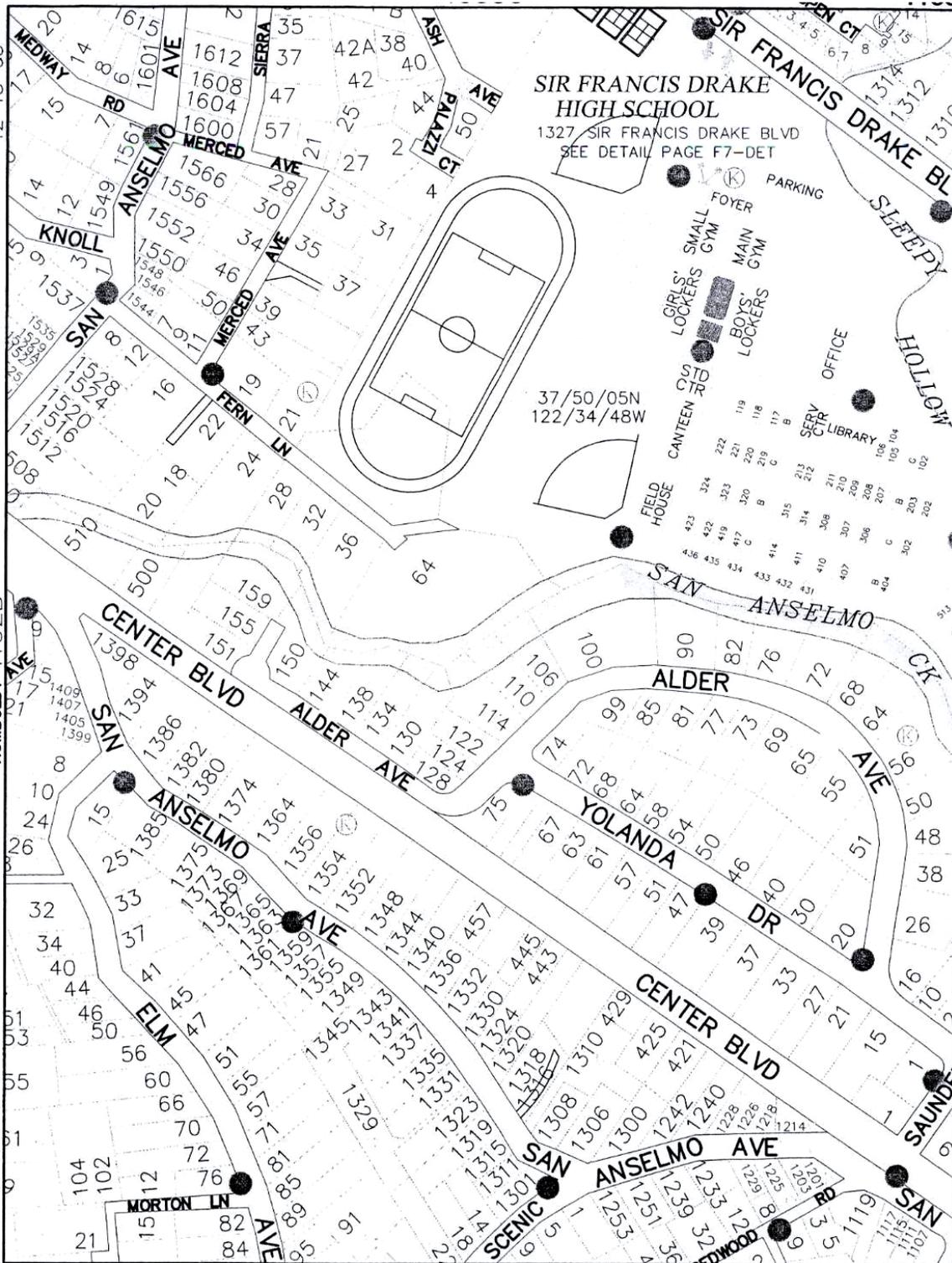
TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



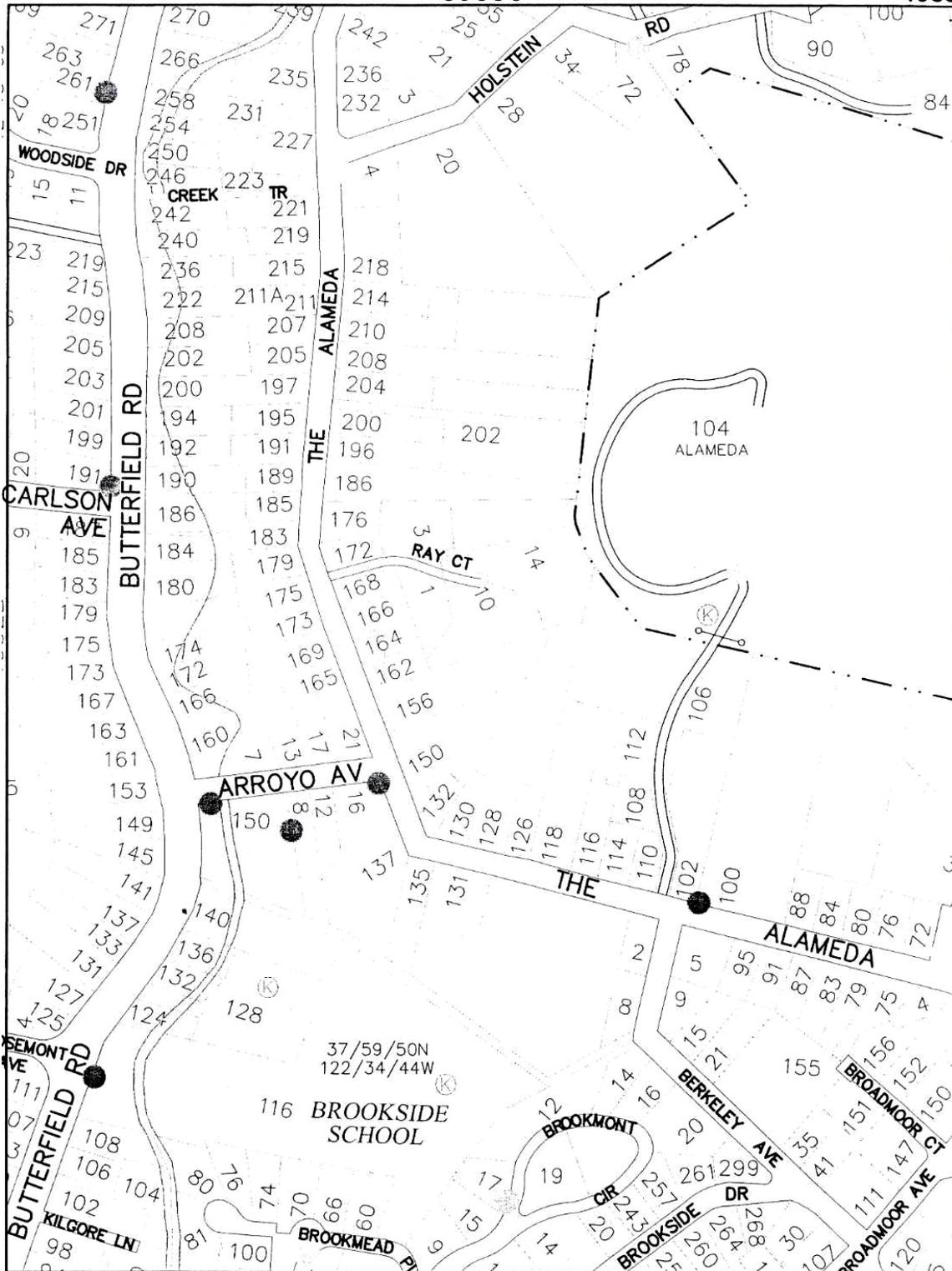
TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



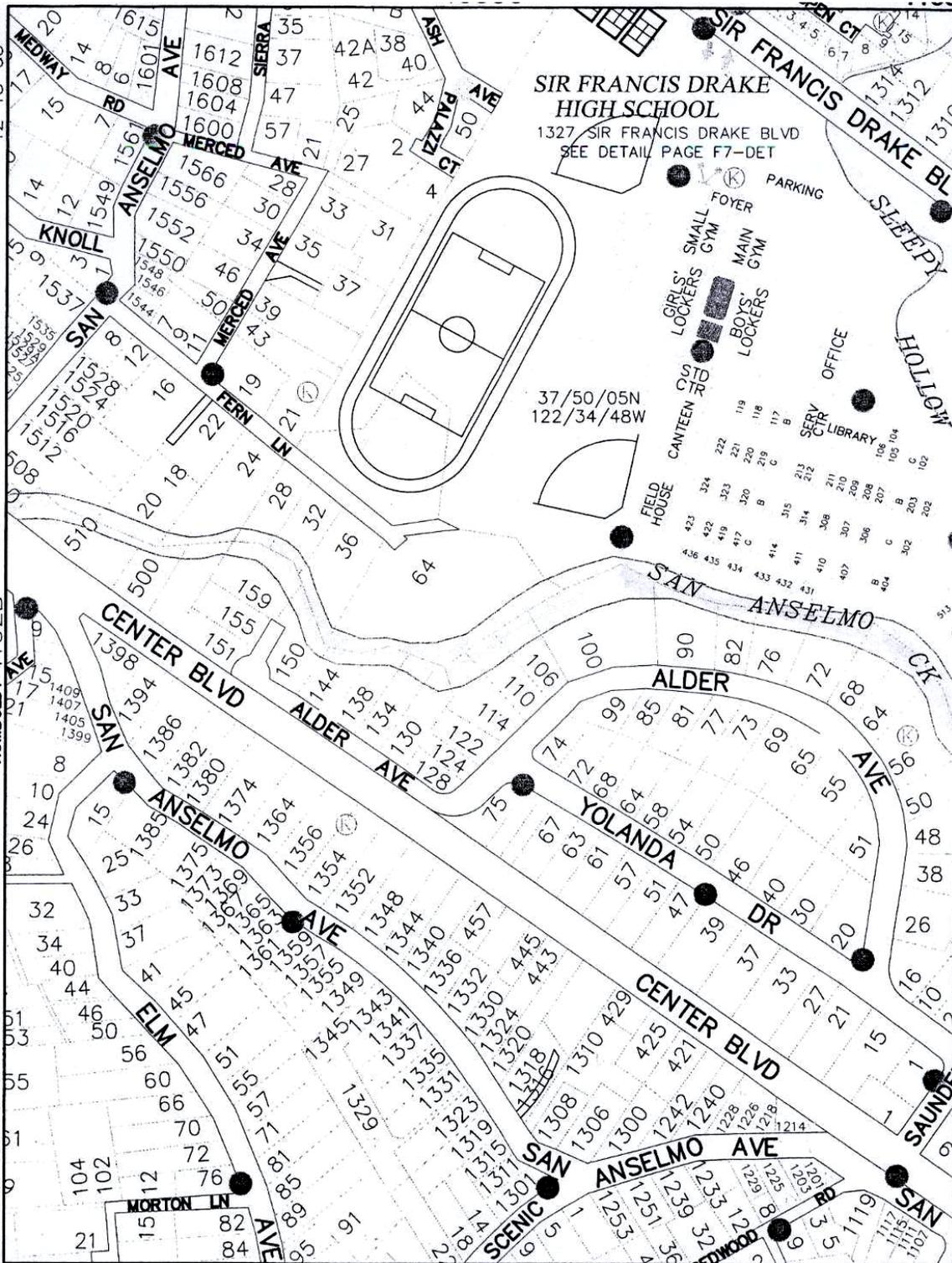
TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



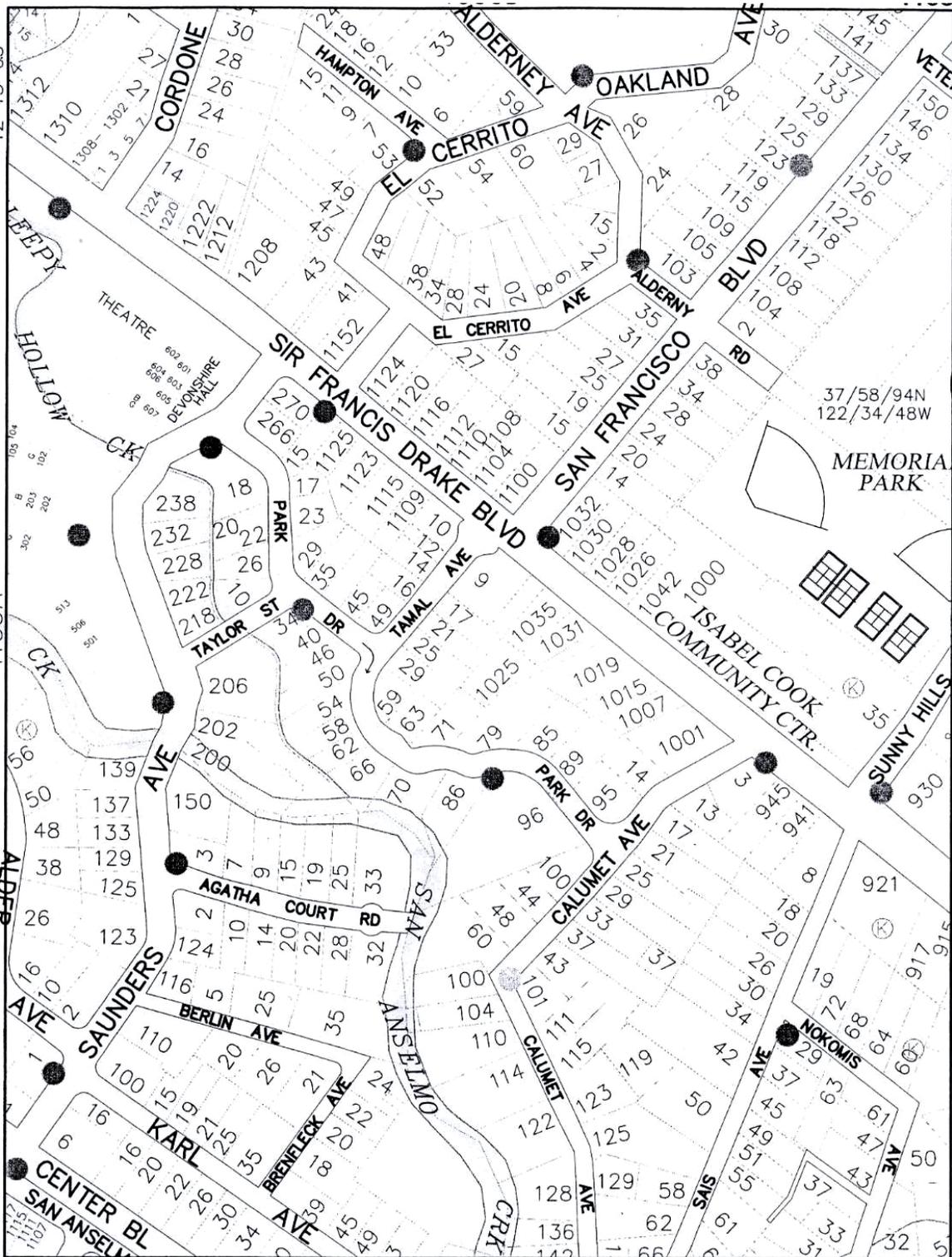
TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN



TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

ABAG Identified FEMA Flood Zones

JURISDICTION: San Anselmo

COUNTY: Marin

HAZARD: FEMA Flood Zones

	Total Number	Minimal or Undetermined Flood Hazard	500-yr Flood Plain or Other Concern (Zone X500)	100-yr Flood Plain (Zone V or Zone A)
HEALTH CARE FACILITIES:	1	1	0	0
Hospital	0	0	0	0
Long-Term Care Facility	0	0	0	0
Primary Care or Specialty Clinic	0	0	0	0
Home Health Agency or Hospice	1	1	0	0
SCHOOLS:	5	2	2	1
Elementary School	3	1	1	1
Intermediate, Middle, or Jr High School	0	0	0	0
High School	1	0	1	0
Continuation High School	0	0	0	0
College or University	1	1	0	0
CRITICAL FACILITIES:	7	3	1	3
City-Owned	7	3	1	3
County-Owned	0	0	0	0
Owned by Special Districts	0	0	0	0
BRIDGES AND INTERCHANGES:	9	5	3	1
Locally-Owned	9	5	3	1
State-Owned	0	0	0	0
	=====	=====	=====	=====

Source: Association of Bay Area Governments, 2004.

Health care facilities are based on a list of licensed facilities from the California Office of Statewide Health Planning and Development. K-12 schools, colleges, and universities are based on a combination of addresses from Thomas Bros. and the individual facilities. Critical facilities were identified by the local jurisdictions. City-owned and county-owned facilities were identified for all cities and counties in the Bay Area. (San Francisco is included as a county.) Thirty water, transit, fire, and other special districts are included as well, but this should not be considered a complete count of special district facilities. It's not always clear whether an agency is part of the city or county government or an independent special district. Agencies with dedicated functions (eg, San Francisco PUC) are included in the city-owned or county-owned totals if they are a department of the city or county. Otherwise they are considered a special district. For critical facilities and bridges/interchanges, these numbers are Preliminary DRAFT totals. It's possible that the sum of the hazard categories will not equal the total number of facilities. This situation will be corrected in the near future.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Climate History

Average Rain Fall

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average temp. (°F)	48.6	52.2	54.5	57.7	61.3	65.6	68.0	68.2	67.0	62.5	54.4	48.5
High temperature (°F)	56.6	61.5	64.8	69.4	73.8	79.2	82.5	82.5	81.0	75.3	64.1	56.8
Low temperature (°F)	40.5	42.9	44.2	45.9	48.7	52.0	53.5	53.8	52.9	49.6	44.6	40.2
Precipitation (in)	7.5	7.3	5.3	1.9	0.8	0.2	0.0	0.1	0.4	1.8	5.3	5.5

Normal climate around Town of San Anselmo, California

Based on data reported by main weather stations National Weather Service

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Days with precip.	10	9	9	5	3	1	0	0	1	3	7	9
Wind speed (mph)	7.1	7.3	8.4	8.6	9.0	9.6	8.9	8.4	7.4	6.4	6.0	6.4
Morning humidity (%)	91	89	86	83	82	78	77	78	77	79	87	88
Afternoon humidity (%)	70	61	53	44	38	32	30	29	31	37	57	67
Sunshine (%)	48	65	74	82	90	94	97	96	93	86	66	49
Days clear of clouds	7	8	10	12	17	22	27	26	24	19	10	8
Partly cloudy days	6	7	9	10	9	6	3	4	4	6	8	6
Cloudy days	19	13	12	8	5	2	1	1	2	6	12	17
Snowfall (in)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

The December 2005/January 2006 Flood was the wettest December in 50 years, and the deluge struck on December 21. The rainfall for December 2005 was 27.13 inches recorded at Lake Lagunitas, making it the 4th. wettest December since 1879. The average rainfall for December ranges between 5.5 and 9.2 inches.

Part 5 - Problem Assessment

Summary of Flooding Vulnerability & Impact

Business & Industry

After the 1982 and 2005/06 floods over 150 businesses were flooded. In 2005/2006 the downtown area was under 4½ feet of water and mud, which also damaged the Town Hall Police Department, Fire Department and Library.

The losses per business ranged from \$5,000.00 to \$100,000.00 based on owner's estimates. Most did not have flood insurance.

Over three hundred homes in San Anselmo were damaged by the flood with losses ranging from several thousand dollars in clean up cost to tens of thousands of dollars in structural damage. The mitigation elevation cost to raise the homes averages over \$100,000 per home and is found to be cost beneficial based on the current grant funded elevations.

Initial damage estimates to the area were thought to be \$30,000,000.00 including public and private property and businesses.

Public Assistance recovery in San Anselmo following the 2005/2006 winter storms has been slow and tedious. The Town has successfully appealed seven major disaster claims that were initially denied by FEMA. In spite of this, the repair and reconstruction of the Town's damaged facilities is still not complete two years later. FEMA errors in deductions for anticipated insurance proceeds have resulted in countless delays in receiving timely payments for reconstruction projects. As recently as February 2008 these errors have not yet been adjusted by FEMA.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Flood Recovery and Problem Assessment:

SUMMARY OF SAN ANSELMO'S FEMA ISSUES: November 15, 2007

In general the Town of San Anselmo (San Anselmo) is in a prolonged period of waiting for replies from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) on a handful of specific issues related to our recovery from the flooding that took place on December 31, 2005, almost two years ago. We are particularly concerned that the recent wildfires in Southern California and the San Francisco Bay oil spill have taken precedence and that our issues will remain unresolved.

The specific issues are:

1. The funding for the Hazard Mitigation Plans (HMPs) for both the Police Station (\$149K) and Fire Station (\$108.6K) have not yet been obligated by FEMA even though the HMPs were approved in letters dated May and June 2007. Just last week we learned that FEMA is now requiring these HMPs to be mitigated to a 500 year flood level rather than the previously agreed upon 100 year level. The only way we received this information is through regular, persistent inquiries via our representatives with the Governor's Office of Emergency Services (OES).
2. The second (and final) appeal of FEMA's decision not to approve the time extension request for the temporary facility housing the Police Department while the repairs to the original facility were underway is pending FEMA review and puts San Anselmo at risk of having to cover the \$99.4K to house this critical facility.
3. FEMA refuses to pay for ADA upgrades to both the Police and Fire Stations even though they are required by federal, state and local building ordinances.
4. In July 2007 FEMA approved San Anselmo's first appeal of FEMA's denial of payment for a \$127.2K debris removal contract with Ghilotti Brothers. San Anselmo has not yet received this payment.
5. FEMA has not reimbursed San Anselmo for almost \$564K in deductions for anticipated insurance proceeds that we will not receive from our flood insurance even though San Anselmo requested these corrections in April 2007.
6. FEMA has not yet approved funding for the FY 2007 Flood Mitigation Assistance (FMA) home elevation grant in spite of the fact that we received verbal confirmation of approval in the spring of 2007. We have been working for over a year to put this program into place and we currently have 15 Homeowners anxious to prevent future damage to their properties.

In sum San Anselmo has experienced long waits for answers from FEMA, errors that remain uncorrected, and overwhelming frustration in our attempts to recover from the floods and help our citizens protect their properties against future damage.

Transportation

The Town, County and State suffered major road damage in the San Anselmo area as the roadways were covered with over 4 feet of water closing the downtown area and access to many homes.

Section III - Mitigation Strategies

Part 6 – Goals

The goals of the Town of San Anselmo are to mitigate damage caused by flooding as follows:

- Participate in the Ross Valley Watershed Group and Flood Control Zone 9 comprehensive work plan;
- Educate homeowners and merchants on flood mitigation strategies and opportunities for flood insurance;
- Work with residents in flood hazard areas to elevate homes above base flood elevation levels;
- Continue to update the Flood Mitigation Plan annually and pursue grant opportunities.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Short-Term Measures

MEASURE WEIGHT	EASE OF PERFORMING	COST	EFFECTIVENESS	SAFETY IMPLICATION	TIME REQUIRED	TOTAL SCORE
	3	5	1	1	2	
Walk San Anselmo Creek (SAC)	8	3	1	1	5	51
Identify Sub-SAC Problems	2	1	2	1	4	22
Develop Clean-up Protocol	2	1	8	8	5	37
Develop Damage Area Map	1	1	10	10	1	30
Obtain Anecdotal Information	7	1	5	5	8	52
Public/PP Flood Barrier Sys.	2	1	1	1	2	17
Document High Water Marks	5	3	1	1	2	38
Obtain Rainfall Data	2	1	1	1	3	19
Identify "Choke Pints"	2	1	2	1	4	22
Creek Maintenance Protocol	2	1	7	1	4	27
Doc. Flood Response Plan	1	1	1	1	1	12
Flood Insurance Information	1	1	1	1	1	12
Review Flood Alarm System	3	2	1	1	3	27
Flood Prep/Response Plan Card	1	1	1	1	1	12

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Intermediate Term Measures

MEASURE	EASE OF PERFORMING	COST	EFFECTIVENESS	SAFETY IMPLEMENTATION	TIME REQUIRED	TOTAL SCORE
	WEIGHT	3	5	1	1	
Develop Hydraulic Model	7	8	1	1	10	83
Install Rainfall Stations	4	7	1	1	10	69
Install Flow Gauging Stations	5	8	1	1	8	73
Base Flood Elevations	5	6	3	3	8	67
Hardscape/Softscape	8	5	5	5	8	75
Public Input on Permanent Fix	5	2	8	8	8	57
FEMA Community Rating	5	2	8	8	10	61

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Long Term Measures

MEASURE WEIGHT	EASE OF PERFORMING	COST	EFFECTIVENESS	SAFETY IMPLEMENTATION	TIME REQUIRED	TOTAL SCORE
	3	5	1	1	2	
Alarm & Early Warning Sys.	5	5	1	1	10	62
Long Term Structural Fixes	8	10	1	1	10	96
Increase Creek Capacity	8	10	1	1	10	96
Collect Rainfall & Flow Data	3	3	1	1	10	46
Identify Flow By-Pass Options	4	3	1	1	8	45
Identify Flow Improvements for Structures	5	3	1	1	8	48
Flood Elevations	8	10	1	1	8	

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Part 7 – Action Plan

Town of San Anselmo
Flood Advisory Committee

Short Term, Intermediate Term and Long Term Action Plan
March 24, 2006

SAN ANSELMO FLOOD PROTECTION ACTION PLAN

MEASURE	PRIORITY	RESPONSIBILITY	TIME FRAME	COMMITTEE MEMBER	ACTION PLAN
Flood Prep/Response Plan Card	1	Ritter	3 months	P. Ritter	
Document Flood Response Plan	2	Breen/Cooper	3 months	P. Breen W. Cooper	
Flood Insurance	3	Breen/Cooper	3 months	P. Breen W. Cooper	
Public and/or Private Property Flood Barrier Systems	4	Ritter	2 months	P. Ritter	
Obtain Rainfall Data	5	Johnson	6 months	N. Johnson	
Identify Sub-tributary -SAC Problems	6	Stutsman	6 months	D. Stutsman	
Identify "Choke Points"	7	Ludke	6 months	R. Ludke	
Review Flood Alarm System	8	Ludke	9 months	R. Ludke	
Creek Maintenance Protocol	9	Dearth	6 months	G. Dearth	
Develop Damage Area Map	10	Dearth	9 months	G. Dearth	
Develop Clean-up Protocol	11	Dearth	3 months	G. Dearth	
Document High Water Marks	12	Stutsman	9 months	D. Stutsman	
Walk San Anselmo Creek (SAC)	13	Cooper	9 months	W. Cooper	
Obtain Anecdotal Information	14	Stutsman	9 months	D. Stutsman	
Develop Town Creek Map	5	Ludke	3 months	R. Ludke	

SHORT TERM MEASURES

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Town of San Anselmo
 Flood Advisory Committee

Short Term, Intermediate Term and Long Term Action Plan
 March 24, 2006

MEASURE	PRIORITY	RESPONSIBILITY	TIME FRAME	COMMITTEE MEMBER	ACTION PLAN
Public Input on Permanent Fix	2	Town/County	1-2 years	P. Breen	
FEMA Community Rating	3	Town	1 year	P. Breen	
Install Rainfall Stations	4	County	1-2 years	N. Johnson	
Install Flow Gauging Stations	5	County	1-2 years	N. Johnson	
Base Flood Elevations	1A	County for Town	1-2 years	D. Stutsman	
Hardscape/Softscape Town Planning Regulation(s)	6	Town	1-2 years	R. Ludke	
Develop Hydraulic Model	1	County	1-2years	G. Dearth	

INTERMEDIATE-TERM MEASURES

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

Town of San Anselmo
 Flood Advisory Committee

Short Term, Intermediate Term and Long Term Action Plan
 March 24, 2006

MEASURE	PRIORITY	RESPONSIBILITY	TIME FRAME	COMMITTEE MEMBER	ACTION PLAN
Identify Flow By-Pass Options	1	Town/County	1-2 years	D. Stutsman	
Collect Rainfall & Flow Data	1	County	1- 5 years	N. Johnson	
Identify Flow Improvement Alternates/Structures	2	Town/County	1-2 years	G. Dearth	
Alarm & Early Warning System	2	TownCounty	2-3 years	R. Ludke	
Long Term Structural Fixes	3	Town/County	5 years	D. Stutsman	
Increase Creek Capacity	3	Town/County	5 years	D. Stutsman	
Reduce Peak Flow Retention Basins / Cisterns	3	Town/County	2 - 5 years	R. Ludke	

LONG-TERM MEASURES

Part 8 – Flood Damage Mitigation Strategies

Eleven specific Flood Damage Mitigation Strategies have been identified by the Town of San Anselmo:

1. Obtain the latest Corp HEC 2 model or HECRS model for Corte Madera Creek.

- The model needs to be review and updated for the Dec 2005 storm.
- Look for funding to update model

Item is being funded by the Town of San Anselmo and Ross Valley Flood Control Organization is projected to be completed in 2008

2. Obtain a accurate map of San Anselmo/Corte Madera Creek

- Map should show creek layout and landowner parcels
- Map should show flooded properties:

Strategy is being funded by Town of San Anselmo and will be part of the on going planning process expected to be completed by 2008. This is a short term Mitigation Strategy to base future planning on and we do not have a cost for this activity as it is being accomplished by the Flood Planning Committee.

3. Walk /San Anselmo Corte Madera Creek: in order to identify areas that need immediate and long term mitigation strategies applied and contribute to the accurate mapping of the Creek.

- Identify vegetation growth issues (plants, trees, etc)
- Identify structural issues; bridges, buildings, etc.
- Identify restrictions

This Strategy was completed by the San Anselmo Flood Planning Committee in 2007 and the results are being carried forward into future mitigation planning projects

4. Look at additional flow capacity systems to input into model being developed for flood planning and mitigation by the Ross Valley Flood Protection Organization. Considerations are:

- Friction reduction for vegetation and tree removal
- Concrete line sections in critical areas
- Parallel pipe sections
- Look at impacts downstream to above items.

This is a joint project between the Ross Valley Flood Protection Organization and the Town of San Anselmo and is a part of the future planning and implementation strategies. Those strategies will be funded from the Ross Valley Flood Protection assessment funding. We do not have a specific cost to accomplish these strategies at this time as they are still in the study and planning stages.

5. Install a stream warning gauge and utilize the Police Department MEAN System to warn home owners and businesses in the event of a potential flood event. This Strategy is currently in use and is in constant update to contact by cell phones and additional citizens registering.

The Gauge has been installed and has been used two times in recent high water events. Planning and implementation procedures are still be developed.

TOWN OF SAN ANSELMO
FLOOD MITIGATION PLAN

6. The Town of San Anselmo is currently implementing a program to assist homeowners utilize Federal Grants to elevate their homes, the average home elevation in San Anselmo is costing approximately \$130,000.00. The Town is developing program guidelines to administer and manage the grant program.

The Town intends to continue to make the opportunity available for home elevation assistance and continue to apply for FMA grants as they are available for interested homeowners.

The cost to the City for managing the grant program in completing the annual grant application and administering a successful grant award is \$30,000.00 per year in staff, engineering and consulting time.

7. The Town is implementing a program to make flood gate plans available for all of the down town businesses and homeowners who are interested in installing this mitigation strategy. The cost to the town is estimated to be \$3,000.00 over the next 10 year period for technical assistance to the property owners.
8. Initiate cooperative projects with NRCS along the creek to repair failed creek bank areas. One project on Natomis Street has been started and it is seen as an ongoing project-by-project potential mitigation strategy as creek bank failures are identified. This program is funded 100 % by the NRCS.

The Town has initiated a agreement with the Marin Conservation Corps to clean the creek on a periodic basis to prevent debris buildup. This is planned to be an ongoing long term relation ship.

9. The Town is implementing a long term community education through newsletter, and preparedness tips, it is also implementing the same program via radio AM 1610. This is a long term mitigation program and estimated to cost the Town \$25,000. 00 in time and technical support over the next 10 years.
10. The Town is planning to implement and maintain flood notification via automatic telephone calling system to merchants and homes in flood zone. This is a long term mitigation strategy and is under constant upgrade and update. It is projected to cost the Town \$50,000.00 in time and technical upgrades over the next 10 years.
11. To work as a member of the Ross Valley Flood Control Organization the Marin County Flood Control and Conservation District to implement flood reduction mitigation strategies throughout the Ross Valley in coordination with all members of the organization. The cost for each project will be paid for by the levee on properties that was voted on and passed by the citizens of the Town of San Anselmo. Being currently considered is:
 - a. Reduce the constriction points on San Anselmo Creek
 - b. Concrete banks where critical flood protection is needed
 - c. Consideration of increased drainage capability in specific areas being studied.
 - d. Stream vegetation mitigation strategies.

Section IV - Plan Maintenance

Part 9 - Plan Adoption

Resolution following.

Part 10 - Implementation, Evaluation and Revision

The Flood Mitigation Plan will be updated annually in order for the Town of San Anselmo to maintain eligibility status for federal and state grant programs. This Plan will be an Annex to the Town of San Anselmo DMA 2000. The Plan will be distributed to the Disaster Council and Flood Committee for ongoing review and revision. The Town Manager will be the facilitator for this review.

The Plan updates will include information on:

- The progress of mitigation programs/projects;
- The development of new mitigation strategies to reduce loss or damage to facilities and potential loss of lives;
- The identification, if any, of new hazards to the Town of San Anselmo;
- Relevant budgetary reports and grant opportunities, to identify funding constraints or funding opportunities;
- Current status of technical, political, legal and service conditions;
- Steps taken to review and incorporate public involvement.

Every five years after initial approval, the Disaster Council and Flood Committee shall reconvene to conduct a FMP/DMA Plan update after which the Plan shall be submitted through proper channels re-approval.

The hazard mitigation strategies will be reviewed for implementation and effectiveness on an annual basis and a progress report will be included in the 5-year update on the status of the mitigation strategies and programs.