



Agenda Item C.2
DISCUSSION/ACTION ITEM
Meeting Date: January 20, 2009

TO: Mayor and Councilmembers
FROM: Dan Singer, City Manager
CONTACT: Steve Wagner, Community Services Director
SUBJECT: Gap Fire Emergency Response Plan Expenditures

RECOMMENDATION:

- A. Receive a report on the Gap Fire Emergency Response Plan Expenditures; and
- B. Adopt resolution No.09-__ entitled "A Resolution of the City Council of the City of Goleta, California Amending Revenue and Appropriations for Funding the 2008 Winter Storm Preparation Projects for the Fiscal Year 2008/2009."

BACKGROUND:

On September 2, 2008, the City Council approved Resolution No. 08-45 which proclaimed a Local Emergency due to the flood threat associated with the Gap Fire burn area and approved an Emergency Response Plan that included several flood mitigation measures. A copy of the Emergency Response Plan is attached to this report.

In approving the Emergency Response Plan the City Council also delegated expenditure authority to the City Manager for costs associated with the implementation of the mitigation measures and directed staff to return to the Council once the final costs were determined.

All flood mitigation measures identified in the Emergency Response Plan have been implemented and the total costs associated with them have been determined. A summary of the Gap Fire Emergency Response Plan expenditures are included herein for Council consideration.

DISCUSSION:

The flood mitigation measures identified in the Gap Fire Emergency Response Plan ranged from public education and outreach efforts to site specific flood protection improvements at certain road and bridge culverts. In developing the plan, staff generated preliminary cost estimates for the various mitigation measures in order to determine the overall Emergency Response Plan budget. The total cost to implement

all of the mitigation measures identified in the emergency response plan were estimated to be \$405,000, of which an existing allocation of \$172,600 of FEMA funds were part of the adopted FY 2008-09 budget. This created an over allocation of FEMA funds, however additional costs were incurred in other funds that will require additional allocations. Further details are provided below.

Although work on the flood mitigation measures began immediately upon approval of the Emergency Plan, it quickly became apparent that additional resources would be required to complete all the required work before the onset of the winter storm season. Two engineering design firms were hired to assist staff with design engineering and construction inspection of the identified flood mitigation projects. The costs associated with the additional engineering and inspection support was not included in the preliminary cost estimate.

The actual costs associated with implementation of all the flood mitigation measures totaled \$504,542. The increased costs are due to a combination of accelerated construction timelines, higher than estimated bid prices and the costs associated with the additional engineering support services. A table of final costs by project is attached to this report.

Since the actual costs associated with the implementation of the mitigation measures exceeded the estimated amount budgeted, staff is recommending approval of various budget amendments to match allocations with actual expenditures in each fund.

STRATEGIC PLAN:

The work effort associated with responding to the Gap Fire or other significant emergency response efforts are not included in the City’s current Strategic Plan. However, this action is supportive of the Strategic Plan goal entitled “Emphasize Public Safety”.

FISCAL IMPACTS:

The allocated budget and final cost amounts by funding source for implementation of the flood mitigation measures identified in the Gap Fire Emergency Plan are shown in the following table:

Funding Source	Allocated Budget	Actual Expenses	Balance/(Overages)
General Fund	\$85,000	\$75,769	\$9,231
Measure D	\$124,900	\$162,953	(\$38,053)
FEMA	\$345,200	\$190,000	\$155,200
NRCE	\$22,500	\$75,820	(\$53,320)
Total	\$577,600	\$504,542	\$73,058

As shown above the General Fund expenditures came in under budget while the NRCS, and Measure D Fund expenditures exceeded budget.

Due to prior year allocations from Fiscal Year 2008 carryovers, no additional appropriations will be necessary for FEMA.

Additional budget appropriations are required for the Measure D and NRCS Funds. Staff recommends Council adopt the attached resolution amending budget amounts based on actual costs.

Submitted By:

Reviewed By:

Approved By:

Steve Wagner
Community Services
Director

Michelle Greene
Administrative Services
Director

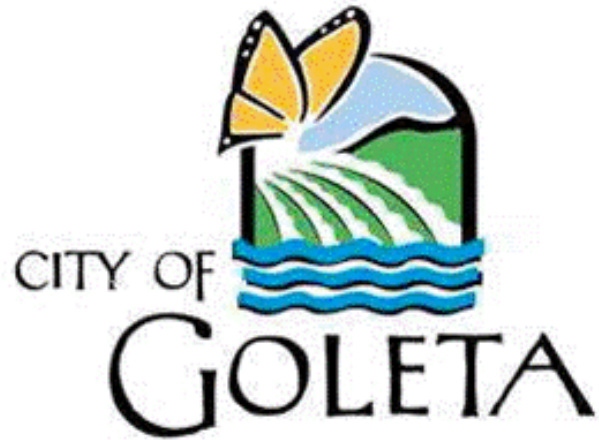
Daniel Singer
City Manager

ATTACHMENTS:

1. Gap Fire Pre- Winter Storm Emergency Response Plan
2. Gap Fire Emergency Response Plan Project Expenditures
3. Resolution No. 09-__ entitled "A Resolution of The City Council of The City of Goleta, California Amending Revenue and Appropriations for Funding the 2008 Winter Storm Preparation Projects for the Fiscal Year 2008/2009."

Attachment 1

Gap Fire Emergency Response Plan



Gap Fire

Pre-Winter Storm

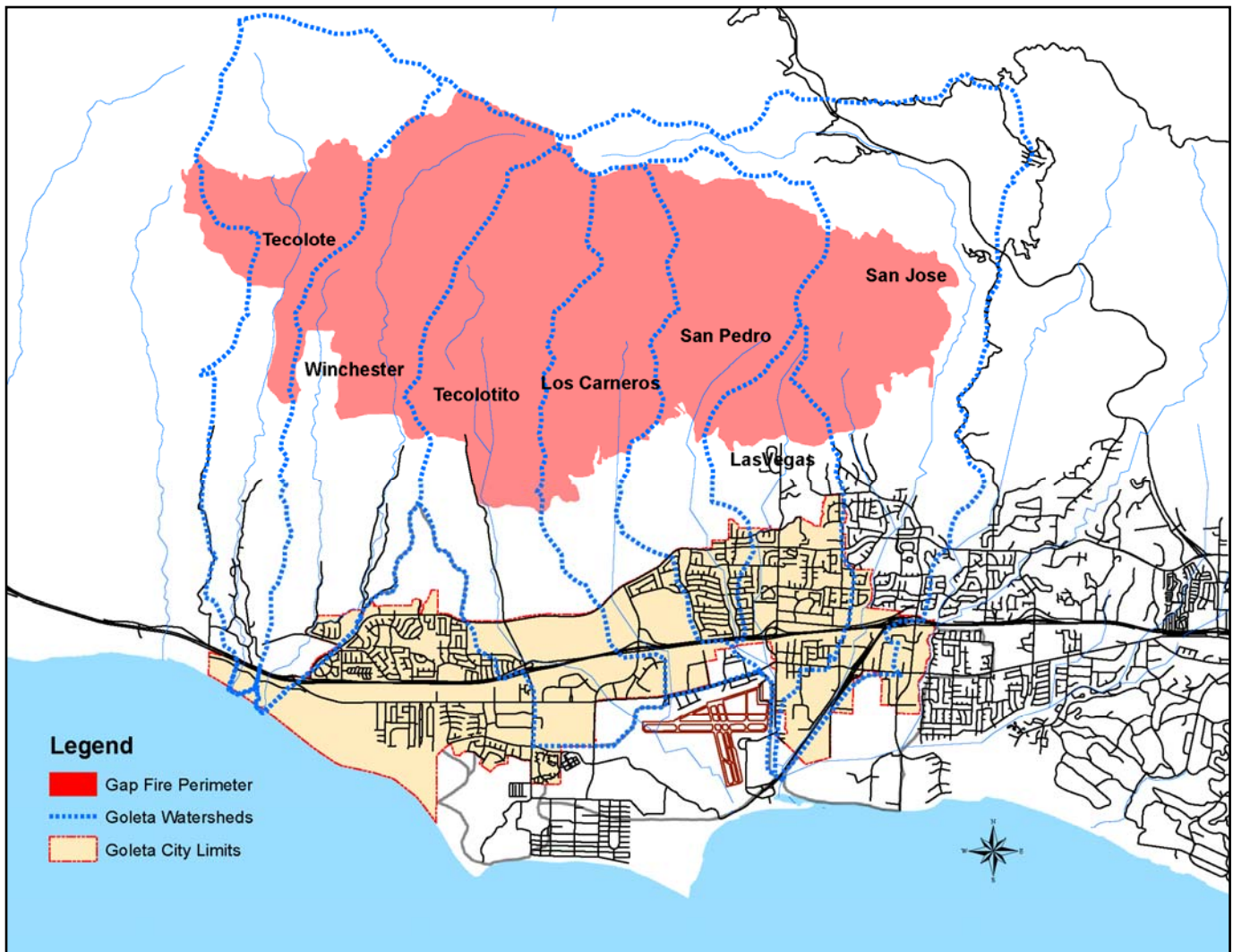
Emergency Response Plan

September 2008

Gap Fire Pre Winter Storm Emergency Response Plan

Introduction

On July 1, 2008 a forest fire was started off of West Camino Cielo above the City of Goleta. The fire, later known as the Gap Fire, grew quickly in size over the next several days as fire personnel struggled to gain control in the steep mountain terrain. By the time the fire was contained 27 days later it had burned approximately 9,500 acres of federally and privately owned lands in the coastal hills above the City of Goleta. The perimeter of the Gap Fire in relation to the City of Goleta is shown below.



The watersheds above the City had not burned for some 50 years prior to the Gap Fire. This dense vegetative cover, along with shifting winds, created extremely hot fire conditions over a majority of the burn area. When forest fires burn at high temperatures, the existing vegetation is

completely burned off and the underlying soil becomes impenetrable to water. These burned watershed conditions can significantly increase the amount of storm water runoff, erosion and debris during storm events and greatly increases the chance of flooding of downstream areas.

The Gap Fire burned through portions of the Tecolote, Winchester, Tecolotito, Los Carneros, San Pedro, Las Vegas and the San Jose watersheds. Each of these watersheds drains through the City of Goleta. The amount of watershed areas affected by the Gap Fire is shown in the following table.

Watershed	Acres Burned	% of Watershed
Tecolote	984	27%
Winchester	2103	54%
Tecolotito	1892	64%
Los Carneros	1508	73%
San Pedro	1535	63%
Las Vegas	252	24%
San Jose	1080	23%

The Gap Fire Pre-Winter Storm Emergency Response Plan presents a comprehensive approach to watershed assessment, hazard mitigation, winter storm operations, public information and community outreach. The Plan describes in detail the steps that City staff conducted to assess the potential post-fire impacts associated with the Gap Fire burn area and identifies specific mitigation measures that will be implemented to reduce the threat of flood damage to developed properties located within the City of Goleta.

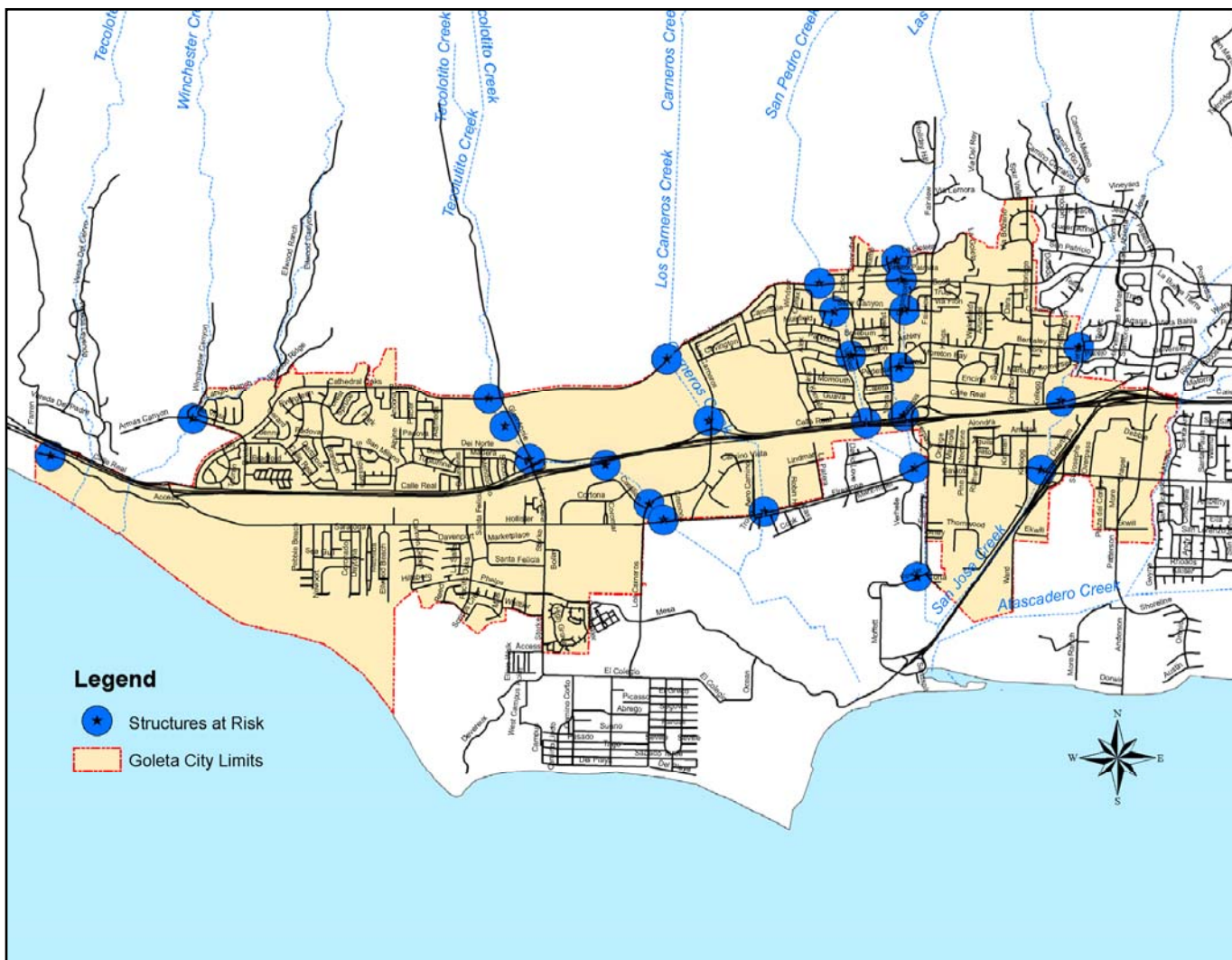
The Santa Barbara County Public Works Department has developed a similar emergency response plan that documents additional pre-winter flood mitigation measures that will be implemented within the City of Goleta, the City of Santa Barbara and in the adjacent unincorporated areas of the County. The City of Goleta's Gap Fire Pre-Winter Storm Emergency Response Plan was developed in cooperation with County Public Works Department staff and is meant to supplement the County's Emergency Watershed Protection Plan.

Post-Fire Impact Assessment

Since the Gap Fire originated on Forest Service lands the United States Forest Service (USFS) took a lead role in directing the overall fire suppression activities. While the fire was still burning the USFS assembled a Burned Area Emergency Response (BAER) team, which is a multi agency group of specialists in a variety of disciplines. The focus of the BAER team was to compile information on the burned watersheds and assess potential impacts to downstream developed communities. Staff from the County of Santa Barbara, City of Santa Barbara and City of Goleta participated in several BAER team meetings to assist in this process. A Burned Area Report summarizing the information compiled by the BAER team was developed. A copy

of the draft Gap Fire BAER report is included as an attachment to this plan (Attachment 1). The BEAR report identifies threats to life and property from increased runoff, flooding, debris flows, erosion, sedimentation and landslides in the burn area and downstream in the City of Goleta.

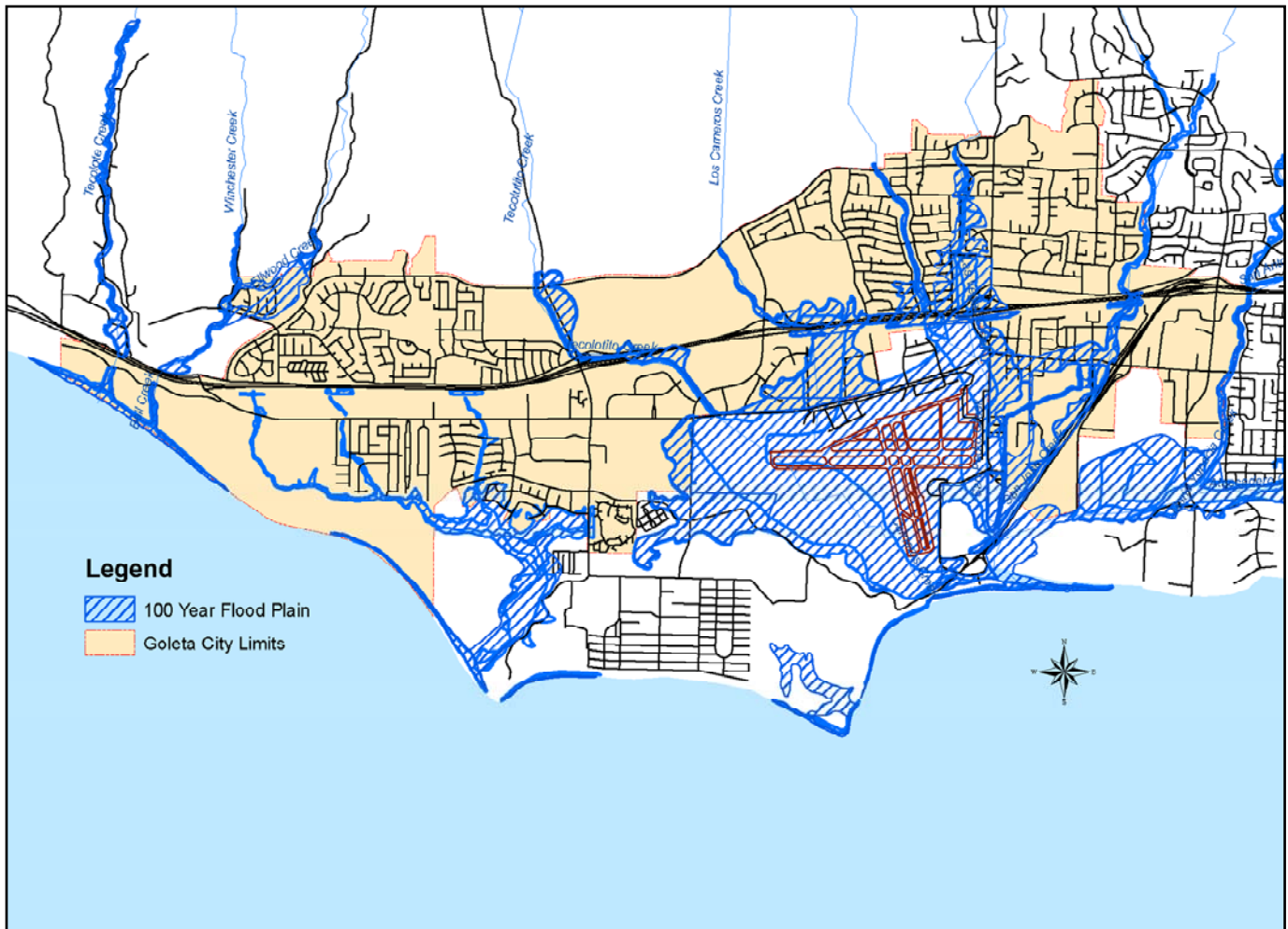
Given the findings of the BAER report and increased potential for debris flows and flooding during winter storm events, City staff conducted field inspections of all affected roadway bridges and culverts located downstream of the burn area. Photos were taken to document the existing conditions and data was collected relating to each bridge structure (opening size, inlet and outlet configuration, sedimentation levels, vegetation, scour etc). The locations of the affected bridges inspected during this process are shown below.



A Qualitative Risk Analysis Matrix was then developed to determine the relative risk levels and recommended pre-winter mitigation measures at all affected roadway bridges and/or culverts. The risk matrix took into account watershed burn severity, risk of plugging, risk of damage, and

sediment loading. A copy of the risk matrix is included as an attachment to this plan (Attachment 2).

Staff also reviewed County Flood Control reports on previous flood events to determine which areas within the City are likely to be impacted due to the increased runoff associated with the Gap Fire. A map showing the Federal Emergency Management Agency's (FEMA's) 100 Year floodplain areas subject to flooding is shown below.



City of Goleta Pre-Winter Storm Mitigation Measures

The City of Goleta is responsible for the maintenance and operation of all City roadway bridges and culverts over the creek corridors and channels. As such, the City's pre-winter storm mitigation measures are primarily related to its bridges and culverts.

Based on the information gathered from the BAER report, historical flood reports, bridge inspections and the bridge structure risk analysis described above, the following pre-winter storm mitigation measures are recommended:

1. **San Pedro Creek Culvert at Calle Real:** This project includes the following culvert modifications:
 - a. Extend the existing concrete splitter wall at the upstream face of the culvert to divert debris flows and reduce the potential for plugging during storm event.
 - b. Remove the existing concrete bridge rail/parapet wall at the upstream face of the culvert and replace it with an open steel pipe guard rail to improve overland flow paths onto Calle Real.
2. **Calle Real from Valdez Avenue to Vega Drive:** This project includes the lowering of the roadway on Calle Real between Valdez Avenue and Vega Drive in order to improve the overland escape conditions associated with the San Pedro Creek Culvert at Calle Real.
3. **Las Vegas Creek at Stow Canyon Road:** This project includes the construction of a concrete splitter wall at the upstream face of the culvert to divert debris flows and reduce the potential for plugging during storm events.
4. **Winchester Canyon Creek at Winchester Canyon Road:** This project includes the placement of large rock rip rap at the downstream end of the culvert for erosion control.
5. **Aerial Hydro Mulching in Selected Upland Areas:** This project consists of the aerial application of hydro mulch on selected hillsides above the City of Goleta. This is a joint project between Santa Barbara County, the City of Santa Barbara and the City of Goleta. The project is funded through the Natural Resources Conservation Service (NRCS) in a 75% federal, 25% local funding split.
6. **Sandbag Distribution Center:** Sandbags will be made available to the public at Fire Station No. 14 on Los Carneros Road. This is a joint effort with the County of Santa Barbara.

County of Santa Barbara Pre Winter Storm Emergency Response Measures

The County Flood Control District is responsible for the maintenance and operation of all major flood control facilities located within the City of Goleta. This includes, but is not limited to, all creek corridors and flood control channels.

The County's Emergency Watershed Protection Plan identifies the following pre-winter storm mitigation measures to reduce the risk of flooding:

1. **Emergency Stream Clearing:** Approximately 16 miles of creek channels upstream and throughout the City of Goleta will be cleared of obstructive vegetation.

2. **Excavation of Sediment Basins:** The existing sediment basins on Tecolotito, Los Carneros, San Pedro and San Jose creeks in and adjacent to the Santa Barbara Airport will be excavated.
3. **Installation of Vegetation Control Structures:** Vegetation/debris control structures will be installed at the following locations:
 - a. Ellwood Creek upstream of Langlo Ranch Road
 - b. Tecolotito Creek upstream of Cathedral Oaks Road
 - c. Los Carneros Creek upstream of Los Carneros Road
 - d. San Pedro Creek upstream of Cathedral Oaks Road
 - e. Las Vegas Creek upstream of Cathedral Oaks Road
4. **Emergency Protective Measures:** This project includes the placement of temporary flood walls at San Pedro Creek upstream of Calle Real and at Los Carneros Creek upstream of Los Carneros Road.
5. **Aerial hydro mulching of selected upland areas:** This joint project between the County of Santa Barbara, City of Santa Barbara and City of Goleta is the same as stated above.
6. **Sandbag Distribution Center:** This joint project between the County of Santa Barbara and the City of Goleta is the same as stated above.

The County's pre-winter mitigation measures are more fully described in the County's Emergency Watershed Protection Plan.

Winter Storm Monitoring and Operations

There will be close coordination with National Weather Service, County of Santa Barbara (both Office of Emergency Services (OES) and Flood Control) and the City of Goleta this winter. City staff will monitor affected bridges during winter storm events whenever runoff is occurring.

Given that even a small amount of rain could trigger debris flows and flooding this winter, the City of Goleta, County of Santa Barbara and City of Santa Barbara have established a Unified Incident Command System (ICS) organization to respond to a widespread flood emergency. City Hall will serve as the emergency operations center (EOC) for the City of Goleta and the new Community Services Department Corporation Yard facility located at the Cabrillo Business Park will operate as a department operations center (DOC).

If bridge plugging and associated flooding does occur, contract forces will be mobilized to remove debris and sediment as required. Emergency contracts with qualified firms will be awarded prior to the beginning of winter.

The County's planned vegetation debris racks will likely catch a significant amount of woody debris during winter storm events. As such the City will work closely with the County to identify

potential stockpile areas where woody debris can be temporarily stored until it can be chipped and hauled off site.

Public Information and Outreach Strategy

A comprehensive public information program is central to the City's pre-winter storm preparations. Making sure that our community is aware of the challenges that we face this winter is important. Reaching out to the residents and businesses in high risk areas and providing them with the informational tools they need to plan for the rainy season will be a key measure of the successful implementation of our plan.

To this end, the City is working closely with the County of Santa Barbara, the City of Santa Barbara, the Forest Service, FEMA, Office of Emergency Services and other state and federal agencies to coordinate public information activities.

The public information program will utilize a number of different tools and strategies to inform the community about the upcoming winter storm season:

Community Meetings: Kicking off the public information campaign will be the September 11, 2008 Community Forum on Gap Fire and Winter Storm Preparation that is being hosted by Supervisors Wolf and Firestone. The forum is being held on Thursday, September 11 from 6 P.M. – 8 P.M. at San Marcos High School and will be televised on local cable stations. The forum will be held in the auditorium with display and information tables staged in the adjacent cafeteria.

While the specific agenda is still being formulated, it is expected that representatives from SB County Fire, Sheriff, County OES, Forest Service, County Flood Control, and FEMA will speak on the Gap Fire and Winter Storm preparations. The City of Goleta will have an information table with maps, City of Goleta contact information and resources, Goleta City Alert information, and basic flood preparedness tips for homeowners. In addition, it is expected that representatives from the City of Goleta will have an official role at the forum.

The City of Goleta anticipates holding a community wide meeting following the September 11 forum at a City location such as the Goleta Valley Community Center, Goleta Valley Junior High or Dos Pueblos High School in order for Goleta City officials, County Flood Control, and FEMA officials to specifically target City of Goleta issues and concerns regarding the upcoming winter rainy season. The scheduling of this meeting is somewhat dependent on the turnout of the September 11 community forum. If there is good turnout at this event by City residents, staff may choose to forego a community wide meeting and instead focus on smaller neighborhood meetings in high risk areas near creeks and flood channels.

Neighborhood Meetings: City staff anticipates holding 3-4 small neighborhood meetings on a weekend or week day evening. These meetings may be held at a church, home, business or on a neighborhood street corner. The goal of these meetings is to directly target neighborhoods that are more likely to be affected by winter rains. These meetings will be held during October.

Targeted Mailers: City staff intends to do a direct targeted mailing to residents and businesses in high risk areas. These mailings will include flood preparation information, key contacts, and dates for neighborhood meetings.

Media Outreach: In addition to media releases, City staff will write columns for Noozhawk and the Goleta Valley Voice on winter storm preparation. City Staff will also pursue radio and television appearances to promote preparedness information.

Goleta TV Channel 19: The City's Channel 19 is already being used to promote the Sept. 11 forum. The event will be taped live and replayed on Channel 19 on Thursdays and Fridays at 10am and 5pm following the event and throughout the months of September and October.

There has also been some discussion about producing a 15 minute segment on flood preparation to run on Channel 19. This is budget dependent.

In addition, City staff is looking into purchasing equipment that will allow messages to "crawl" during live or broadcast programs. Presently, when an emergency message from the National Weather Service, is broadcasted, FCC rules require the information to be broad to cover the viewing area of that channel. However, Goleta TV Channel 19 can run a live crawl with specific information to Goleta that City staff generates. The cost of this type of equipment is approximately \$3,000. If Council authorizes the purchase of the technology to use this tool remotely, the cost is approximately \$6,000 more.

City Website: The City website will have a specific section on all winter storm preparation information. There will be links to pertinent agencies, flood preparation, maps, key City info and other resources. This will be in place prior to the Sept. 11 forum.

Goleta City Alert: City staff intends to utilize Goleta City Alert to notify residents and businesses about neighborhood meetings as well as to notify if there is an emergency. Given the very quick nature of flooding, Goleta City Alert is an invaluable tool as it can reach thousands of residents and businesses in a matter of minutes.

Information Kiosks: City Staff intends to deploy information kiosks in high risk neighborhoods. The kiosks will have maps, key information, and preparedness information. The goal for deployment of kiosks will be the first week of October.

City Newsletter: The Monarch Press will reach residents the first week of October. There is an article on winter storm preparation, keys tips and directions on where to get more information.

Mitigation Measure Cost Estimates

Preliminary cost estimates for the proposed pre-winter storm mitigation measures and public information program have been developed and are summarized in the following table.

Project	Estimated Total Cost
Winchester Canyon Road Culvert Repair at Winchester Canyon Creek	\$200,000
Calle Real Culvert Modifications at San Pedro Creek	\$30,000
Calle Real Overland Escape Improvements from Valdez to Vega	\$75,000
Stow Canyon Road Culvert modifications at Las Vegas Creek	\$15,000
Hydro Mulching of Selected Upland Areas	\$70,000
Public Information Program	\$10,000
Sand Bag Distribution	\$5,000
Totals	\$405,000

The costs associated with debris removal following winter storm events will be dependent on magnitude and frequency of debris removal operations.

SUMMARY

The Gap Fire burn area poses a significant threat to the City of Goleta. Increased storm water runoff, debris production and erosion during winter storm events are expected to occur. City staff has worked closely with Santa Barbara County and City of Santa Barbara staff to develop a comprehensive pre winter emergency response plan to reduce the flood threat associated with the Gap Fire burn area. Although implementation of the proposed mitigation measures identified in the City of Goleta's and County of Santa Barbara's emergency response plans will reduce the flood threat associated with the Gap Fire burn area, it will not completely eliminate the threat. In the coming months City staff will continue to work closely with other agencies to inform the public how they can best prepare for the coming winter rainy season.

Attachments:

1. 2008 Gap Fire – Burned Area Emergency Response Report
2. Qualitative Risk Analysis Matrix

Attachment 2

Gap Fire Emergency Response Plan Project Expenditures

Gap Fire Emergency Response Plan Project Expenditures

Project	Estimated Costs	Actual Costs				Total
		Design	Construction	Inspection	Other	
Winchester Canyon	\$200,000	\$2,112	\$186,136	\$29,342		\$217,590
San Pedro Creek	\$30,000	\$10,246	\$64,909	\$8,944		\$84,099
Calle Real	\$75,000	\$19,578	\$80,569			\$100,147
Las Vegas Creek	\$15,000	\$4,395	\$17,533	\$2,421		\$24,348
Aerial Hydromulching	\$70,000				\$53,896	\$53,896
Creek Debris Removal*	\$0				\$3,840	\$3,840
Sand Bags	\$5,000				\$3,227	\$3,227
Public Information Program	\$10,000				\$6,731	\$6,731
San Pedro Creek Sewer Line Replacement *	\$0		\$8,000			\$8,000
Total	\$405,000	\$36,331	\$357,146	\$40,707	\$67,694	\$501,879

* Mitigation projects identified after approval of Emergency Response Plan.

Attachment 3

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GOLETA,
CALIFORNIA AMENDING REVENUE AND APPROPRIATIONS FOR
FUNDING THE 2008 WINTER STORM PREPARATION PROJECTS
FOR THE FISCAL YEAR 2008/2009**

RESOLUTION NO. 09-__

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GOLETA, CALIFORNIA AMENDING REVENUE AND APPROPRIATIONS FOR FUNDING THE 2008 WINTER STORM PREPARATION PROJECTS FOR THE FISCAL YEAR 2008/2009

WHEREAS; In July 2008 the Gap Fire burned approximately 9,500 acres in coastal watersheds above the City of Goleta; and

WHEREAS, the burned condition of the watersheds above the City of Goleta poses a significant flood threat due to increased runoff debris production and erosion potential during winter storm events; and

WHEREAS, the City of Goleta has assessed the flood threat associated with the Gap Fire and has identified from specific mitigation measures to reduce the flood threat; and

WHEREAS, these pre-winter storm mitigation measures are described in the City's "Gap Fire Emergency Response Plan"; and

WHEREAS, preliminary cost estimates of the mitigation measures identified in said plan where used for budget purposes; and

WHEREAS, the mitigation measures have been completed and the actual costs have been determined; and

WHEREAS, the City of Goleta desires to fund the identified mitigation measures and make appropriate revenue and appropriation adjustments for the pre-winter storm mitigation measures based on actual costs.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF GOLETA DOES RESOLVE, DETERMINE, AND ORDER AS FOLLOWS:

SECTION 1:

The City of Goleta Operating Budget for Fiscal Year 2008-09 is hereby amended as follows:

411-4-9028-220 Grant Proceeds	\$ (155,200)
412-4-9028-220 Grant Proceeds	\$ 53,320
101-5-9028-561 Contract Services - Emergency Response	\$ (9,231)
411-5-9022-706 CIP-Engineering	\$ 17,400
411-5-9028-561 Contract Services - Emergency Response	\$ (172,600)
412-5-9028-561 Contract Services - Emergency Response	\$ 53,320
205-5-9028-561 Contract Services - Emergency Response	\$ 38,053

SECTION 2.

The City Clerk shall certify to the adoption of this Resolution.

PASSED, APPROVED AND ADOPTED this 20th day of January, 2009.

 ROGER S. ACEVES, MAYOR

ATTEST:

APPROVED AS TO FORM:

 DEBORAH CONSTANTINO
 CITY CLERK

 TIM W. GILES
 CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF GOLETA) ss.
CITY OF GOLETA)

I, Deborah Constantino, City Clerk of the City of Goleta, California, DO HEREBY CERTIFY that the foregoing Resolution No. 09-__ was duly adopted by the City Council of the City of Goleta at a regular meeting held on the 20th day of January, 2009, by the following vote of the Council:

AYES:

NOES:

ABSENT:

(SEAL)

DEBORAH CONSTANTINO
CITY CLERK