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Summary of Emergency Planning for Dam or Levee Failures in San Mateo County

Issue

What improvements can be made within San Mateo County to assure public safety in the event of a dam or levee failure?

Summary

Within the physical boundaries of San Mateo County (County) there are 12 dams listed by government agencies as posing high or significant risk in the event of failure. Furthermore, at least four levees between Brisbane and East Palo Alto are shown on a recent FEMA map as uncertified to withstand a hundred-year flooding event. Failure of certain of these structures could threaten the lives of many thousands of County residents.

The 2006-2007 San Mateo County Civil Grand Jury (Grand Jury) interviewed personnel in the Office of Emergency Services and Homeland Security (OES/HS), a division of the County Sheriff's Office. This agency is responsible for coordinating emergency response within the County including those emergencies that would ensue as the result of a dam or levee failure. Other information came from pertinent newspaper articles and web pages such as those of the Army Corps of Engineers' National Inventory of Dams (NID), the American Society of Civil Engineers, the Federal Emergency Management Agency (FEMA) Flood Map Modernization Program and the Association of Bay Area Governments.

The OES/HS has four parallel methods for notifying citizens facing emergencies such as possible inundation from a dam or levee failure. These methods are: 1) a telephonic emergency notification system, 2) a notification system that contacts registered wireless devices and cell phones, 3) loud speakers/sirens in hazard areas, and finally, 4) street-to-street law enforcement warnings. Although warning methods are in place, the information about dams and levees needed both for planning and to ensure timely warnings in emergencies is not readily available to OES/HS. Examples of this lack of

information are: 1) a lack of Emergency Action Plans (EAP) which are supposed to be prepared by dam and levee operators, 2) inadequate information about the structural integrity of the County's dams and levees, and 3) recent denial of public access to the NID website without a password, and the failure to promptly issue a password as duly requested by OES/HS.

To correct these problems, the Grand Jury recommends that: 1) dam and levee owners be required to prepare Emergency Action Plans and submit them annually to the OES/HS, 2) the OES/HS do what is necessary (without duplicating other information gathering efforts) to gather the information required to assess risk and develop response plans for levee and dam emergencies, and 3) the County Public Works Director work with city and special district public works officials and engineers in the County to evaluate and report on the integrity of dams and levees throughout San Mateo County.

Emergency Planning for Dam or Levee Failures in San Mateo County

Issue

What improvements can be made within San Mateo County to assure public safety in the event of a dam or levee failure?

Background

Earlier in its term, the 2006-2007 San Mateo County Civil Grand Jury (Grand Jury) issued a report on readiness within San Mateo County (County) to respond to a tsunami. While the tsunami study was still fresh in the minds of the Grand Jurors, the New York Times published an Op-Ed piece (see Appendix for references and web sites used as source material) on the poor condition of the nation's dams that aroused the Jury's interest as to the level of preparation within the County for dam failures.

For the purposes of this report, a dam is a barrier used to contain a body of fresh water. When asked about dams, most people in the County think of the one at the Crystal Springs reservoir. However, that dam is only one of eight dams in the County listed as "high hazard" by the Army Corps of Engineers (ACE) in its National Inventory of Dams (NID). High hazard means a probable loss of life should the dam fail, and that it is likely that there will be significant economic losses, environmental damage and human casualties. Another five dams in the County are listed as being of significant risk, where loss of life is not likely, but economic and other losses are. The presence of such dams in the County, combined with the American Society of Civil Engineers (ASCE) finding that in 2005 "... *the number of dams identified as unsafe is increasing at a faster rate than those being repaired ...*" makes this an important topic, especially in our seismically active area.

During the course of this investigation, it also became apparent to the Grand Jury that levees, which we define here as barriers constructed to contain streams, or keep out the Bay or ocean, may pose a greater danger than dams. The Grand Jury was unable to locate information about the levees in the County as detailed as that found for dams in the NID. As a consequence, this report tends to emphasize dams and treats levees less completely, although levees are no less important.

The County government and the 20 incorporated cities recognized the need for a unified emergency services organization and entered into a Joint Powers Agreement (JPA) more than 30 years ago. The JPA is governed by the Emergency Services Council (ESC), comprised of one representative from each city, and one County Supervisor. The ESC approves budgets and provides strategic direction for emergency response activities in the

County. The cities contribute money to fund the JPA based upon a formula that takes into account the population and average assessed property value of each city. The County then matches the funds contributed by the cities. The ESC budget also includes state and federal Emergency Management Assistance program funds in substantial amounts.

The ESC reviews and recommends emergency plans, programs and agreements for adoption by the Board of Supervisors and city councils in order to carry out the purposes of an emergency services organization. The Office of Emergency Services/Homeland Security (OES/HS) is in the Office of the Sheriff. The OES/HS reports to the ESC, and serves as that agency's emergency services organization. The OES/HS is responsible for minimizing the effects of disasters and major emergencies on the citizens of the County. The OES/HS is responsible for the Emergency Operations Plan (EOP), that describes planned response within the County to extraordinary emergencies associated with natural disasters, man-made technological incidents, and national security alerts.

Investigation

Several information sources were consulted during the course of this investigation. As noted above, the impetus for the investigation was the January 22, 2007 Op-Ed piece in the New York Times by Jacques Leslie, and subsequent discovery of the ASCE website, which grades the nation's infrastructure. The most recent ASCE "report card" gave U.S. dams a D grade, meaning that they were judged to be poor in terms of "*... condition and performance, capacity vs. need, and funding vs. need*"

The Grand Jury then consulted the ACE web site and downloaded NID information for San Mateo County. Access to the NID has been denied to the public since shortly after the Grand Jury obtained information about the dams. The website for the California Department of Water Resources (DWR) Division of Safety of Dams also provided information about the dams in the County. Much of the State information duplicated that found earlier in the NID. (The NID is also available for sale by Investigative Reporters and Editors, Inc., which describes itself as, "a grassroots nonprofit organization dedicated to improving the quality of investigative reporting.") The Federal Emergency Management Agency (FEMA) Flood Map Modernization Program and the Association of Bay Area Governments' (ABAG) websites were also useful sources of information.

Personnel in the San Mateo County Sheriff's OES/HS were interviewed and proved to be very cooperative and extremely valuable sources of information. OES/HS personnel, in turn, contacted a representative of the State DWR Division of Safety of Dams, who was quite responsive in supplying requested information to OES/HS, after which the OES/HS provided the information to the Grand Jury.

Findings

The findings listed below have been grouped into several major topic areas.

Dams in the County

- The Army Corps of Engineers National Inventory of Dams descriptive information for the 12 dams listed as high or significant risk is shown in Table 1

Table 1 Information about dams in San Mateo County listed by the Army Corps of Engineers in the National Inventory of Dams as being of high or significant risk to property and life

Dam name	Type ¹	built	lng. ²	ht. ²	Storage. ³	Area	Inspection	Hazard ⁴
Lower Crystal Spr	PG	1888	600	140	57910	1323	12/13/2001	H
Pilarcitos	ER	1866	520	103	3100	109	12/13/2001	H
San Andreas	ER	1870	727	107	19027	550	12/13/2001	H
Laurel Creek	ER	1969	287	40	55	3	09/21/2001	S
Emerald Lk. Low.	ER	1885	280	57	45	4	10/29/2001	S
Searsville	PG	1890	260	68	952	90	10/11/2001	H
Crocker	ER	1890	200	45	22	2	10/10/2001	H
Spenser Lake	ER	1876	400	87	73	4	10/10/2001	H
Notre Dame	ER	–	210	51	120	8	09/21/2001	H
Bear Gulch	ER	1896	730	61	672	25	11/21/2001	H
Coastways	ER	1951	1000	46	100	9	10/29/2001	S
Pomponio Ranch	ER	1952	245	63	256	13	07/19/2001	S
Rickey	ER	1951	200	64	47	4	10/10/2001	S

Notes: 1. *dam type*: ER=Rock fill PG=Gravity

2. *Length & height*: feet

3. *Normal Storage*: acre-feet

4. *Hazard potential*: S= significant, no loss of life expected, significant property damage
H=high, probable loss of lives and significant property damage.

Access to information about dams in the County

- When OES/HS personnel tried to obtain National Inventory of Dams information from the Army Corps of Engineers website in April 2007, OES/HS was denied access without a password.
- OES/HS applied for the required password in April 2007, but had not received it by late May 2007.
- As noted earlier, National Inventory of Dams information is no longer publicly available directly from the Army Corps of Engineers, yet it appears to be available from other sources.
- The California Department of Water Resources Division of Safety of Dams inventory is not organized by county, which makes it very difficult to use.

Emergency Action Plans

- The OES/HS recently contacted owners of 19 dams located in San Mateo County that were listed in the National Inventory of Dams (the 19 included some low risk dams); the OES/HS found that none of those dams had an Emergency Action Plan, although the National Inventory of Dams indicated that all the dams listed in Table 1 had such plans.
- A representative of the California Department of Water Resources Division of Safety of Dams told the OES/HS that no Emergency Action Plans are on file for dams in our County, and in fact, there are very few Emergency Action Plans on file for dams located elsewhere in California.
- The California Department of Water Resources Division of Safety of Dams has no authority to require that Emergency Action Plans be prepared by the dam owners.

Dam inspections

- The California Department of Water Resources Division of Safety of Dams apparently inspects all dams annually, including Crystal Springs Dam, although the National Inventory of Dams lists the last inspection dates for dams as in 2000 or 2001 (See Table 1).

Preparedness

- The OES/HS has maps on file that show areas that would be inundated in case of a failure of the dams listed in Table 1.
- Table 2 lists types of facilities that are in potential inundation zones.

Table 2. Important facilities located in dam inundation zones

(Source: Association of Bay Area Governments, 2004)

Type of facility	Total in County	In inundation zones
HEALTH CARE FACILITIES:	69	15
Hospital	12	2
Long-Term Care Facility	18	2
Primary Care or Specialty Clinic	19	5
Home Health Agency or Hospice	20	6
SCHOOLS:	227	27
Elementary School	160	21
Intermediate, Middle, or Jr. High School	29	3
High School	29	2
Continuation High School	4	0
College or University	5	1
CRITICAL FACILITIES:	615	109
City-Owned	516	104
County-Owned	49	4
Owned by Special Districts	50	1
BRIDGES AND INTERCHANGES:	358	76
Locally-Owned	153	45
State-Owned	205	31

- OES/HS has four parallel methods for notifying citizens of a variety of hazards, including residents facing possible inundation from a dam failure. Those methods are:
 1. The Telephonic Emergency Notification System (TENS) from Dialogic Communications Corporation, which is an Internet-based calling system that rapidly alerts residents in their homes and mobilizes first responders. Phone lists are being generated so that residents living in areas identified on inundation maps can be notified by TENS in the event of an imminent dam or levee failure.
 2. A voluntary notification system from Roam Secure, Inc. that contacts wireless devices such as personal digital assistants (PDA) and cell phones of those who have registered with OES/HS. This system is being implemented.
 3. Loud speakers/sirens in hazard areas such as inundation zones.
 4. Street-to-street law enforcement warnings.
- Although the OES/HS is responsible for emergency planning and mitigation, it has no authority to mandate that dam owners prepare Emergency Action Plans.
- The role of the OES/HS is largely that of a coordinating agency rather than a responder.
- Cities and special districts are responsible for making sure that the OES/HS is given the information it needs to coordinate emergency response.
- OES/HS cannot effectively plan for dam failures without emergency action plans, but dam owners are not required by law to prepare these plans or provide them to OES/HS.
- State and Federal statutes provide the framework for coordination of emergency responses. The OES/HS deals with the State and the State deals with the Federal agencies such as Federal Emergency Management Agency.
- When the Federal Emergency Management Agency becomes directly involved in an emergency at the local level, there is direct contact between the OES/HS and that Federal agency.
- OES/HS considers participation in mock disaster drills put on by various local, state and federal agencies to be important, and dam and levee owners do not participate in these exercises.

Levees

- Emergency officials have estimated, based on numbers of dwellings in areas that would be flooded, that there is a potential for the loss of tens of thousands of lives should certain levees fail catastrophically.
- OES/HS officials are very concerned about the disaster potential of levees.
- At least four levees between Brisbane and East Palo Alto are shown on a recent Federal Emergency Management Agency map (available for download from Federal Emergency Management Agency Region IX Flood Map Modernization Program web site listed in the appendix) as uncertified to withstand a hundred-year flooding event.

- The County Department of Public Works has a detailed list of levees in the County.
- The Federal Emergency Management Agency is currently gathering information for two County levees for which there is insufficient information to assess risk.
- Most levees in San Mateo County are city properties, but some are owned by the County, some by the State, some by corporations, and one is owned by the City of San Jose.
- Maintenance of some levees owned by cities within the County is reputed to be inadequate and those levees may pose a high risk.
- Apparently, cities and special districts have no authority to request other levee owners in their jurisdictions to take actions such as preparing Emergency Action Plans.
- Some repairs were recently completed on East Palo Alto levees that had been damaged by a series of heavy rains and high creek volumes in January 2006.
- Levees are not listed in the State list of dams and therefore may not be required to have Emergency Action Plans.

Conclusions

Based on the above findings, the Grand Jury concludes that:

- The potential for loss of life in the event of a catastrophic dam or levee failure is great, running into the tens of thousands of lives.
- The OES/HS is generally well prepared to coordinate an appropriate emergency response for citizens in identified inundation zones provided timely information is received about a threat from a dam or levee.
- The OES/HS has little authority to require that dam and levee operators provide all the information necessary for it to prepare adequately.
- The lack of plans prepared by dam and levee operators poses a significant danger to those living in inundation zones.
- The State of California's information about dams and levees in San Mateo County (and in the State as a whole) is inadequate for planning for responses to emergencies.
- The sharing of information about dams and levees among facility operators, cities, the County and the OES/HS is insufficient for emergency preparedness planning.
- Dam and levee owners should participate in county-wide mock disaster drills.

Recommendations

The Grand Jury recommends that the Emergency Services Council:

1. Authorize and fund, by December 31, 2007, the Office of Emergency Services/Homeland Security to work with other entities in our County to acquire whatever information is necessary to assess risk and develop response plans for levee and dam emergencies. This effort should use all available information, including that collected by the Federal Emergency Management Agency, to formulate plans specific to our County and to incorporate those plans into the Office of Emergency Services/Homeland Security countywide Emergency Operations Plan by July 31, 2008.
2. Adopt a resolution by December 31, 2007, requesting all jurisdictions – whether County, City, Special District, or private entity – having authority or responsibility for dam or levee integrity cooperate with the Office of Emergency Services/Homeland Security to develop credible emergency plans for responding to dam failure and levee degradation or breach.

The Grand Jury recommends that the Sheriff instruct the Office of Emergency Services/Homeland Security to:

1. Cooperate with affected cities and dam and levee owners to develop credible Emergency Action Plans by March 31, 2008, for responding to a prospective dam or levee failure, degradation or breach. These Emergency Action Plans should be prepared and submitted immediately upon completion to the Office of Emergency Services/Homeland Security, followed by annual updates. An Emergency Action Plan would include at least the following information:
 - A list of three or more separate telephone contacts to insure that at least one responsible official or responder is made aware of an emergency at the facility
 - Other actions that would be undertaken to mitigate the danger in the event of an emergency
 - The most recent inspection report
2. Cooperate with Cities, the County Public Works Director and with the Federal Emergency Management Agency to identify, evaluate and report on the integrity of dams and levees in the County.

The Grand Jury recommends that the city councils of Belmont, Burlingame, East Palo Alto, Foster City, Pacifica, Redwood City, San Carlos, San Mateo and South San Francisco do the following:

1. Cooperate with the Office of Emergency Services/Homeland Security to develop credible Emergency Action Plans by March 31, 2008, for responding to a

prospective dam or levee failure, degradation or breach. These Emergency Action Plans should be prepared and submitted immediately upon completion to the Office of Emergency Services/Homeland Security, followed by annual updates. An Emergency Action Plan would include at least the following information:

- A list of three or more separate telephone contacts to insure that at least one responsible official or responder is made aware of an emergency at the facility
 - Other actions that would be undertaken to mitigate the danger in the event of an emergency
 - The most recent inspection report
2. Direct the appropriate City department to work with the County Public Works Director and with the Federal Emergency Management Agency to identify, evaluate and report on the integrity of dams and levees in the County.

The Grand Jury recommends that the County Board of Supervisors:

1. Adopt a resolution to encourage all jurisdictions to cooperate with the Office of Emergency Services/Homeland Security to develop credible Emergency Action Plans by March 31, 2008, for responding to a prospective dam or levee failure, degradation or breach. These Emergency Action Plans should be prepared and submitted immediately upon completion and be followed by annual updates. The Emergency Action Plans would include at least the following information:
 - A list of three or more separate telephone contacts to insure that at least one responsible official or responder is made aware of an emergency at the facility
 - Other actions that would be undertaken to mitigate the danger in the event of an emergency.
 - The most recent inspection report.
2. Direct the County Manager to instruct the County Public Works Director to work with appropriate City Departments and the Federal Emergency Management Agency to identify, evaluate and report on the integrity of dams and levees in the County to the Office of Emergency Services/Homeland Security.

Appendix: Source material used for this report

Text documents

1. Albach, B., 2007: Work wraps up on damaged East Palo Alto Levees, *Palo Alto Daily News*, May 10, 2007.
2. American Society of Civil Engineers, 2003: 2003 Progress Report, *An Update to the 2001 Report Card for America's Infrastructure*, ASCE, 7 pp.
3. Federal Emergency Management Agency, 2007: *Letter to Community Floodplain Administrators in San Mateo County requesting Existing Certification Documents for Levees Recognized on Effective Flood Insurance Rate Maps* - letter dated January 23, 2007
4. _____, 2007: *San Mateo County Levee Status*, Map created April 20, 2007 by Michael Baker Jr., Inc.
5. _____, 2007: *San Mateo County Levee Status*, Table created April 20, 2007 by Michael Baker Jr., Inc.
6. Leslie, J., 2007: Before the Flood, *New York Times*, Op-Ed Page, January 22, 2007.
7. San Mateo County (California) Civil Grand Jury, 2006-2007: *Tsunami Alert and Evacuation on the San Mateo County Coast*, 11 pp.
8. San Mateo County (California) Civil Grand Jury, 2005-2006: *When the Big One Comes Will We Respond with a Bang or a Whimper?*, 40 pp.

Websites

9. American Society of Civil Engineers (ASCE) report card, <http://www.asce.org/reportcard/2005/page.cfm?id=23>
10. Army Corps of Engineers, National Inventory of dams. <http://crunch.tec.army.mil/nid/webpages/nid.cfm>
11. Association of Bay Area Governments. <http://www.abag.ca.gov/levees.html>
12. California Department of Water Resources, Division of Safety of Dams, <http://damsafety.water.ca.gov/>
13. Flood Map Modernization Program, Federal Emergency Management Agency Region IX, http://rmc.mapmodteam.com/rmc9/San_Mateo.htm#Levee

14. Investigative reporters and editors, Inc.,
http://www.ire.org/inthenews_archive/damresources.html
15. San Mateo County Civil Grand Jury 2006-2007, published reports,
<http://www.sanmateocourt.org/director.php?filename=./grandjury/2006/index.php>
16. San Mateo County Civil Grand Jury 2005-2006, published reports,
<http://www.sanmateocourt.org/director.php?filename=./grandjury/2005/index.php>
17. Office of Emergency Services/Homeland Security,
http://www.co.sanmateo.ca.us/smc/departments/home/0,,14095463_14132044_59210022,00.html



COUNTY OF SAN MATEO

Office of the Sheriff

GREG MUNKS
SHERIFF

CARLOS G. BOLANOS
UNDERSHERIFF

400 COUNTY CENTER • REDWOOD CITY • CALIFORNIA 94063-1662 TELEPHONE (650) 599-1664 www.smcsheriff.com

ADDRESS ALL COMMUNICATIONS TO THE SHERIFF

July 27, 2007

Honorable John L. Grandsaert
Judge of the Superior Court
Hall of Justice
400 County Center, 2nd Floor
Redwood City, CA 94063-1655

Re: 2007-2008 Grand Jury Report: Emergency Planning for Dam or Levee Failures
in San Mateo County

Dear Judge Grandsaert:

We wish to acknowledge the efforts of the Civil Grand Jury with this report regarding the efforts of the Office of Emergency Services and Homeland Security (OES/HS). We feel the report is accurate, and depicts an understanding and appreciation by the members of the Grand Jury regarding issues relating to Emergency Planning for dam or levee failures in our County.

As the Director of the Area Office of Emergency Services and Homeland Security, I fully support the findings of the Civil Grand Jury and appreciate their assistance in alerting residents and visitors to the very real, and potential danger of a dam or levee failure occurring in San Mateo County.

Recommendations:

The Grand Jury recommends that the Sheriff instruct the Office of Emergency Services/Homeland Security to:

1. Cooperate with affected cities and dam and levee owners to develop credible Emergency Action Plans by March 31, 2008, for responding to a prospective dam or levee failure, degradation or breach. These Emergency Action Plans should be prepared and submitted immediately upon completion to the Office of Emergency Services/Homeland Security, followed by annual updates. An Emergency Action Plan would include at least the following information:

- A list of three or more separate telephone contacts to insure that at least one responsible official or responder is made aware of an emergency at the facility
- Other actions that would be undertaken to mitigate the danger in the event of an emergency
- The most recent inspection report

Response:

The Office of Emergency Services and Homeland Security (OES/HS) is administered by a Joint Powers Authority (JPA) in which each City and the County participate in by Emergency Services Council participation and funding. It is the standard business practice of OES/HS to work cooperatively and in concert with each City and the County.

OES/HS has already acquired several templates of Emergency Action Plans (EAP) for dams and will insure each dam owner is offered staff assistance in completing these templates to facilitate the writing of the EAP for the individual dams. OES/HS will also gather information on levee Emergency Action Plans to work with each City/County Emergency Coordinator and Public Works Officials in compiling levee EAPs as well.

We concur that there needs to be several levels of communication and support the idea of three responsible contact telephone numbers to insure the First Responders can reach a responsible person in the event of an incident.

OES/HS is the appropriate organization to keep updated inspection reports and EAP's. I will also insure that while OES/HS houses these valuable documents, they maintain them in a retrievable fashion so they are ready for use in the event of an emergency or planned exercise.

In conclusion we appreciate the recommendations made by the Grand Jury and will continue our commitment to provide safety, security, and a uniquely cooperative approach as we face the many threats and challenges to our County.

Sincerely,

Greg Munks, Sheriff

cc: Board of Supervisors
Grand Jury website



The City of Burlingame

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September 5, 2007

Hon. John L. Grandsaert
Judge of the Superior Court
Hall of Justice
400 County Center, 2nd Floor
Redwood City, CA 94063-1655

Re: Emergency Planning for Dam or Levee Failures in San Mateo County

Dear Judge Grandsaert:

Pursuant to Penal Code section 933, the Burlingame City Council provides the following comments to the 2006-2007 Civil Grand Jury report communicated by letter dated June 25, 2007.

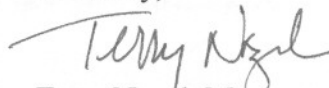
The City of Burlingame acknowledges the findings of the Grand Jury and agrees with the conclusion of the report and with the report's recommendations as they apply to the City of Burlingame.

1) The City is developing an annex to the City's Emergency Operations Plan for responding to a levee failure, breach, or degradation in cooperation with the County Office of Emergency Services. This will supplement the City's Emergency Operations Plan that encompasses flooding and other emergency operations issues.

2) The City's Public Works Department is currently evaluating the City's levees along the Bayfront.

While the City does not have any dams within its jurisdiction, the City's participation in the Central County Fire Department will ensure that the City is informed and prepared for any effects from a dam failure in adjacent land.

Sincerely,



Terry Nagel, Mayor

cc: City Council

EXHIBIT A
City of Belmont's Response To
Emergency Planning For Dam or Levee Failures in San Mateo County

This is in response to the Grand Jury report dated June 28, 2007 on Emergency Planning for Dam or Levee Failures in San Mateo County. The following are the City of Belmont's responses to each of the recommendations outlined in the Grand Jury report:

RECOMMENDATION 1:

Cooperate with the Office of Emergency Services/Homeland Security to develop credible Emergency Action Plans by March 31, 2008, for responding to a prospective dam or levee failure, degradation or breach. These Emergency Action Plans should be prepared and submitted immediately upon completion to the Office of Emergency Services/Homeland Security, followed by annual updates. An Emergency Action Plan would include at least the following information:

- A list of three or more separate telephone contacts to insure that at least one responsible official or responder is made aware of an emergency at the facility
- Other actions that would be undertaken to mitigate the danger in the event of an emergency
- The most recent inspection report

Response to Recommendation 1:

The City of Belmont agrees with the findings and is currently working on an Emergency Action Plan for Notre Dame Lake Dam (also known as Water Dog Lake Dam) with the San Mateo County Office of Emergency Services/Homeland Security. This plan will include the recommendations outlined in the Grand Jury Report. Other actions will include the use of the City's Teleminder phone system to advise all affected residents.

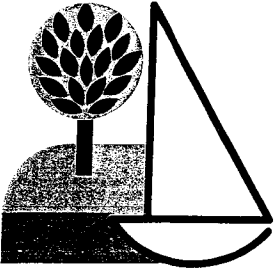
The Emergency Action Plan will include three City officials:
Ray Davis, Public Works Director 650.595.7459
Don Mattei, Police Chief 650.595.7421
Doug Fry, Fire Chief 650.802.4225

RECOMMENDATION 2:

Direct the appropriate City Department to work with the County Public Works Director and with the Federal emergency Management Agency to identify, evaluate and report on the integrity of dams and levees in the County.

Response to Recommendation 2:

The City of Belmont agrees with the findings. The Department of Public Works will be the City Department to work with County DPW and FEMA on any report dealing with the integrity of dams and levees in the County. The contact person is Karen Borrmann, Assistant Director of Public Works/ City Engineer - 650.595.7469.



City of Foster City

ESTERO MUNICIPAL IMPROVEMENT DISTRICT

610 FOSTER CITY BOULEVARD
FOSTER CITY, CA 94404-2222
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September 4, 2007

Honorable John L. Grandsaert
Judge of the Superior Court
Hall of Justice
400 County Center, 2nd Floor
Redwood City, CA 94063-1655

Subject: EMERGENCY PLANNING FOR DAM OR LEVEE FAILURES IN SAN MATEO COUNTY

Dear Judge Grandsaert:

Thank you for the opportunity to review and comment on the above referenced Grand Jury Report filed on June 28, 2007. After review of the Grand Jury Report and available data pertaining to our community, following is Foster City's response to the findings of the Grand Jury:

- Based on review of the Inundation Map of Crystal Springs Dam (copy attached) available from the San Francisco Water Department, the City of Foster City is indicated to be outside the limit of inundation, therefore Foster City is not expected to be impacted by a failure of the Crystal Springs Dam.
- In accordance with Federal Emergency Management Agency's (FEMA's) letter dated July 23, 2007 to Foster City (copy attached), Foster City's perimeter levee meets FEMA's minimum certification criteria, therefore, FEMA will continue to accredit Foster City's levee as providing adequate protection from the 1 – percent annual chance (base) flood.
- Foster City will continue to work with the various agencies (County Public Works, FEMA, etc.) as necessary to identify, evaluate and report on the integrity of our perimeter levee.
- Foster City has worked and will continue to work cooperatively with the San Mateo County Office of Emergency Services/Homeland Security (OES/HS) on maintaining an up-to-date Emergency Operations Plan, which addresses event specific response checklists for such incidents as flood, severe weather/storm, earthquake, etc. Currently, the Emergency Operations Plan is being reviewed and updated to comply with the National Incident Management System (NIMS) requirements. The updated Emergency Operations Plan is scheduled to be adopted by the City Council at the regularly scheduled meeting on November 5, 2007.
- While the Emergency Operations Plan is not formally updated on an annual basis, it is continuously being reviewed and updated as appropriated. The City will continue to work cooperatively with OES/HS to refine the Emergency Operations Plan.

Mayor Barbara Pierce
Vice Mayor Rosanne Foust

Council Members
Alicia Aguirre
Ian Bain
Jim Hartnett
Diane Howard
Jeff Ira



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September 11, 2007

The Honorable John L. Grandsaert
Judge of the Superior Court
Hall of Justice, 400 County Center, 2nd Floor
Redwood City, CA 94063-1655

Subject: Response to Grand Jury Report: "*Emergency Planning for Dam or Levee Failures in San Mateo County*"

Dear Judge Grandsaert:

Thank you for the opportunity to respond to the 2006-2007 Grand Jury report dated June 28, 2007, containing recommendations related to "*Emergency Planning for Dam or Levee Failures in San Mateo County*."

The City agrees with the findings and recommendations contained in this Civil Grand Jury report.

Recommendation #1 (paraphrased): *In cooperation with OES and Homeland Security, develop and annually update an Emergency Action Plan for responding to a dam or levee failure.*

Response: The City will implement this recommendation, and anticipates completion of a draft Emergency Action Plan within 12 months.

Recommendation #2 (paraphrased): *Work with County Public Works and FEMA to identify, evaluate, and report on integrity of dams or levees.*

Response: The City will implement this recommendation, and anticipates a status report on the levees under its jurisdiction within 12 months.

Again, and on behalf of the City Council, thank you for the opportunity to respond on these issues.

Sincerely,

A handwritten signature in cursive script that reads "Barbara Pierce".

Barbara Pierce
Mayor

cc: Members, City Council
Ed Everett, City Manager
Peter Ingram, Community Development Services Director
Gerry Kohlmann, Fire Chief

Honorable John L. Grandsaert
Judge of the Superior Court
Page 2
September 4, 2007

We continuously strive to maintain a safe environment for our residents. Safety of our community is of paramount concern to us and we appreciate the review by the Grand Jury.

Sincerely,


Ron Cox
Mayor
City Council

cc: City Council of Foster City
Jim Hardy, City Manager, City of Foster City
Ray Towne, Public Works Director, City of Foster City
Tom Reaves, Fire Chief
Sue Lee, Senior Civil Engineer
Norm Dorais, Maintenance Manager



September 17, 2007

Hon. John L. Grandsaert
Judge of the Superior Court
Hall of Justice
400 County Center; 2nd Floor
Redwood City, CA 94063-1655

Re: *Emergency Planning For Dam or Levee Failures in San Mateo County Report*

Dear Judge Grandsaert:

On June 28, 2007, the San Mateo County Civil Grand Jury filed a report regarding emergency planning for dam or levee failures in San Mateo County. Laurel Creek Dam, owned by the City of San Mateo, was listed by the Army Corps of Engineers in the National Inventory of Dams as being a high or significant risk to property and life in the event of failure. The City also owns and maintains the bayfront levees within the City limits. As a result a copy of the Grand Jury report was sent to the City of San Mateo City Council for response.

The submittal letter directs the City Council to consider the report, to state its agreement of disagreement with the Grand Jury's findings, and to state its intentions with respect to the Grand Jury's recommendations. Working with staff the City Council has reviewed and considered the Grand Jury's report. This letter has been presented to the San Mateo City Council, and the City Council has authorized me as Mayor to sign and submit it as the response to the Grand Jury's report.

Grand Jury's Finding and Conclusions

1. The potential for loss of life in the event of catastrophic dam or levee failure is great, running into the tens of thousands of lives.
2. The Office of Emergency Services/Homeland Security (OES/HS) is generally well prepared to coordinate an appropriate emergency response for citizens in identified inundation zones provided timely information is received about a threat from a dam or levee.
3. The OES/HS has little authority to require that dam and levee operators provide all the information necessary for it to prepare adequately.
4. The lack of plans prepared by dam and levee operators poses a significant danger to those living in inundation zones.
5. The State of California's information about dams and levees in San Mateo County (and in the State as a whole) is inadequate for planning for response to emergencies.
6. The sharing of information about dams and levees among facility operators, cities, the County and the OES/HS is insufficient for emergency preparedness planning.
7. Dam and levee owners should participate in county-wide mock disaster drills.

City of San Mateo Responses to the Grand Jury's Recommendations

The City of San Mateo in general agrees with the above Grand Jury findings. Note that Laurel Creek Dam was inspected by the California Department of Water Resources Division of Safety of Dams on November 28, 2006, and appears to be in good condition. The complete inspection report is included in Attachment A.

Although the City's levee system is currently not certified by the Federal Emergency Management Agency (FEMA) as meeting current standards for 100-year storm events, the City has completed its evaluation and preliminary design of needed levee improvements. The information was submitted for FEMA's review as part of the request for a Conditional Letter of Map Revision (CLOMR) and approved by FEMA in October 2006. Essentially, by issuing a CLOMR to the City, FEMA approved the evaluation of the levee system and preliminary design of the needed levee improvements, and committed to certify the City's levee upon completion of these improvements. The City is in the process of identifying funding to complete these improvements. The City also conducts annual maintenance inspections to all the levees in accordance with the FEMA approved Operation and Maintenance Manual.

The responses to the Grand Jury's recommendation pertaining to the City of San Mateo include:

1. *Cooperate with OES/HS to develop credible Emergency Action Plans by March 31, 2008, for responding to a prospective dam or levee failure, degradation or breach. The Emergency Action Plan should be prepared and submitted immediately upon completion to the OES/HS, followed by annual updates.*

The City has provided as-built drawings of our dams and an inundation map of the Crystal Spring Dam to the OES/HS after the release of this report. We are finalizing Emergency Action Plans for responding to a dam or levee failure and anticipate submitting them to the OES/HS tentatively in October 2007. The Emergency Action Plans will include at least the following information:

- A list of three or more separate telephone contacts to insure that at least one responsible official or responder is made aware of an emergency at the facility
 - Other actions that would be undertaken to mitigate the danger in the event of an emergency
 - The most recent inspection reports
2. *Direct the appropriate City department to work with the County Public Works Director and FEMA to identify, evaluate and report on the integrity of dams and levees in the County.*

The Public Works Department is responsible for the maintenance of the City's dams and levees. As indicated above in this letter, the Public Works Department has been working with FEMA to evaluate the integrity of the City's levee system. The Public Works Department has also communicated with the County Public Works Department for coordination of dam and levee evaluations. We will continue working with these agencies to identify, evaluate and report on the integrity of the City's dams and levees.

Conclusion

On behalf of the City of San Mateo, I would like to thank the San Mateo Civil Grand Jury for their service to the residents of our City. We are taking the Grand Jury's recommendations seriously and will be diligent and expeditious in our follow-up actions.

Sincerely,

A handwritten signature in black ink, appearing to read "Jack Mathews", with a long, sweeping flourish extending to the right.

Jack Mathews
Mayor

Attachment

FIELD SHEET KEY ITEMS

<u>No.</u>	<u>Item</u>
A1	Embankment Dam-Upstream Face
A2	Embankment Dam-Downstream Face
A3	Embankment Dam-Abutment
A4	Embankment Dam-Crest
A5	Embankment Dam-Galleries
B1	Concrete Dam-Upstream Face
B2	Concrete Dam-Downstream Face
B3	Concrete Dam-Abutment
B4	Concrete Dam-Crest
B5	Concrete Dam-Galleries
6	Approach Channel
7	Stoplogs
8	Control Structure of Spillway
9	Spillway Gates and Controls
10	Spillway Chute or Tunnels
11	Spillway Energy Dissipator
12	Intake-of Outlet
13	Outlet Conduit
14	Control Facilities of Outlet
15	Outlet Energy Dissipator
16	Outlet Channel
17	Seepage and Drainage
18	Instrumentation
19	Reservoir
20	Access Roads
21	Other

List deficiencies and what will be or has been done to correct them -
Refer to letters, on-going studies.

Make a statement as to Safety. If the dam has unsafe condition, restriction of storage
should be recommended.

INSPECTION OF DAM AND RESERVOIR IN CERTIFIED STATUS

Name of Dam Laurel Creek

Dam No 1070

Date of Inspection 11/21/06

Observations and Comments (Continued)

Item No.*	Item Name and Observation and Comment
17	<u>Seepage</u> - Due to recent rains the embankment and toe area was wet. No live seepage was noted on the groins, toe and downstream face of the dam.
18	<u>Instrumentation</u> - There are four surveying monuments at the dam. Two of the monuments are located on the crest and the remaining two are on downstream slope. There are no reporting requirements for these monuments.

Author/Typist PPD/ppd

Sheet 2 of 2 Sheets

FIELD SHEET KEY ITEMS

<u>No.</u>	<u>Item</u>
A1	Embankment Dam-Upstream Face
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B1	Concrete Dam-Upstream Face
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6	Approach Channel
7	Stoplogs
8	Control Structure of Spillway
9	Spillway Gates and Controls
10	Spillway Chute or Tunnels
11	Spillway Energy Dissipator
12	Intake-of Outlet
13	Outlet Conduit
14	Control Facilities of Outlet
15	Outlet Energy Dissipator
16	Outlet Channel
17	Seepage and Drainage
18	Instrumentation
19	Reservoir
20	Access Roads
21	Other

List deficiencies and what will be or has been done to correct them -
Refer to letters, on-going studies.

Make a statement as to Safety. If the dam has unsafe condition, restriction of storage
should be recommended.



COUNTY OF SAN MATEO

Office of the Sheriff
Area Office of Emergency Services
and Homeland Security

GREG MUNKS
SHERIFF

CARLOS G. BOLANOS
UNDERSHERIFF

400 COUNTY CENTER • REDWOOD CITY • CALIFORNIA 94063-1662 TELEPHONE (650) 363-4790 www.smcsheriff.com

ADDRESS ALL COMMUNICATIONS TO THE SHERIFF

September 26, 2007

Honorable John L. Grandsaert
Grand Jury Judge
Hall of Justice and Records
400 County Center
Redwood City, CA 94063

Re: 2006-07 Grant Jury Report: Emergency Planning for Dam or Levee Failures in San Mateo County

Dear Judge Grandsaert:

We wish to acknowledge the effort of the Civil Grand Jury with this report regarding the Emergency Services Council (ESC). We feel the report is accurate, and depicts an understanding and appreciation by the members of the Grand Jury regarding issues relating to dam or levee failures in San Mateo County.

The Emergency Services Council is in general agreement and fully supports the findings of the Civil Grand Jury. The ESC appreciates a partnership in alerting residents and visitors to the very real danger of dam or levee failures in San Mateo County.

Recommendations:

1. The Grand Jury recommends that the ESC authorize and fund, by December 31, 2007, the Office of Emergency Services/Homeland Security to work with other entities in our County to acquire whatever information is necessary to assess risk and develop response plans for levee and dam emergencies. This effort should use all available information, including that collected by the Federal Emergency Management Agency, to formulate plans specific to our County and to incorporate those plans into the Office of Emergency Services/Homeland Security countywide Emergency Operations by July 31, 2008.

A JOINT POWERS REPRESENTING:

TOWN OF ATHERTON • CITY OF BELMONT • CITY OF BRISBANE • CITY OF BURLINGAME • CITY OF COLMA • CITY OF DALY CITY • CITY OF EAST PALO ALTO
CITY OF FOSTER CITY • CITY OF HALF MOON BAY • TOWN OF HILLSBOROUGH • CITY OF MENLO PARK • CITY OF MILLBRAE • CITY OF PACIFICA
TOWN OF PORTOLA VALLEY • CITY OF REDWOOD CITY • CITY OF SAN BRUNO • CITY OF SAN CARLOS • CITY OF SAN MATEO • COUNTY OF SAN MATEO
CITY OF SOUTH SAN FRANCISCO • TOWN OF WOODSIDE

2. Adopt a resolution by December 31, 2007, requesting all jurisdictions – whether County, City, Special District, or private entity – having authority or responsibility for dam or levee integrity cooperate with the Office of Emergency Services/Homeland Security to develop credible emergency plans for responding to dam failures and levee degradation or breach.

Responses:

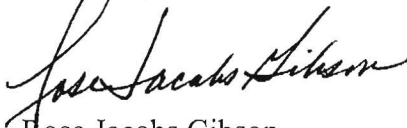
1. The Emergency Services Council agrees that the Office of Emergency Services/Homeland Security work with other entities in our county is vital to the public safety of residents in the County, and that it is important to work with these agencies to acquire whatever information, including information collected by FEMA, to assess risk and develop emergency response plans for levee and dam emergencies as soon as possible.

However, since the funding for this initiative is not included in the FY 2007-08 budget, it will be necessary to attempt to secure grant funding until such time that funding can be secured as part of the FY 2008-09 budget cycle.

The Emergency Services Council agrees that it is critical to formulate plans specific to our county and to incorporate those plans onto the Office of Emergency Services/Homeland Security Countywide Emergency Operations Plan at the earliest possible opportunity.

2. The Emergency Services Council agrees that it would be productive to adopt the recommended resolution, and plans to do so within the recommended time frame.

Sincerely,



Rose Jacobs Gibson
President, San Mateo County Board of Supervisors
Chair, San Mateo County Emergency Services Council

RESOLUTION NO. _____

**EMERGENCY SERVICES COUNCIL,
COUNTY OF SAN MATEO, STATE OF CALIFORNIA**

* * * * *

**RESOLUTION REQUESTING ALL JURISDICTIONS HAVING RESPONSIBILITY FOR
DAM OR LEVEE INTEGRITY TO COOPERATE WITH THE COUNTY OFFICE OF
EMERGENCY OPERATIONS/HOMELAND SECURITY TO DEVELOP EMERGENCY
PLANS FOR RESPONDING TO
DAM FAILURE AND LEVEE DEGRADATION OR BREACH**

WHEREAS, the Grand Jury has recently studied and addressed improvements that can be made to assure public safety in the event of a levee or dam failure in the County of San Mateo; and

WHEREAS, the Emergency Services Council provides strategic direction for emergency response activities in the County of San Mateo; and

WHEREAS, in connection with that study, the Grand Jury has recommended that the Emergency Services Council adopt a resolution requesting that all jurisdictions whether County, City, Special District, or private entity having responsibility for dam or levee integrity cooperate with the Office of Emergency Operations/Homeland Security to develop emergency plans for responding to dam failure and levee degradation or breach; and

WHEREAS, the Emergency Services Council agrees that it would be productive and that public safety would be enhanced by adoption of the recommended resolution.

NOW THEREFORE, IT IS HEREBY DETERMINED AND ORDERED that this Emergency Services Council hereby requests and encourages all jurisdictions whether County, City, Special District, or private entity having responsibility for dam or levee integrity, to cooperate with the County Office of Emergency Operations/Homeland Security to develop emergency plans for responding to dam failure and levee degradation or breach.

* * * * *



COUNTY OF SAN MATEO
Inter-Departmental Correspondence

County Manager's Office

DATE: September 10, 2007
BOARD MEETING DATE: September 25, 2007
SPECIAL NOTICE: None
VOTE REQUIRED: Majority

TO: Honorable Board of Supervisors
FROM: John L. Maltbie, County Manager
SUBJECT: 2006-07 Grand Jury Response

Recommendation

1. Accept this report containing the County's responses to the following 2006-07 Grand Jury report: Emergency Planning for Dam or Levee Failures in San Mateo County.
2. Adopt a Resolution encouraging all jurisdictions to cooperate with the Office of Emergency Services/Homeland Security to develop credible Emergency Action Plans by March 31, 2008, for responding to prospective dam or levee failure, degradation or breach.

VISION ALIGNMENT:

Commitment: Responsive, effective and collaborative government.

Goal 20: Government decisions are based on careful consideration of future impact, rather than temporary relief or immediate gain.

This activity contributes to the goal by ensuring that all Grand Jury findings and recommendations are thoroughly reviewed by the appropriate County departments and that, when appropriate, process improvements are made to improve the quality and efficiency of services provided to the public and other agencies.

Discussion

The County is mandated to respond to the Grand Jury within 90 days from the date that reports are filed with the County Clerk and Elected Officials are mandated to respond within 60 days. To that end, attached is the County's response to the Grand Jury report on Emergency Planning for Dam or Levee Failures in San Mateo County, issued on June 28, 2007.

Emergency Planning for Dam or Levee Failures in San Mateo County

Findings:

Staff is in general agreement with the Grand Jury's findings.

Recommendations:

- 1. Adopt a resolution to encourage all jurisdictions to cooperate with the Office of Emergency Services/Homeland Security to develop credible Emergency Action Plans by March 31, 2008, for responding to a prospective dam or levee failure, degradation or breach. These Emergency Action Plans should be prepared and submitted immediately upon completion and be followed by annual updates. The Emergency Action Plans would include at least the following information:**
 - **A list of three or more separate telephone contacts to insure that at least one responsible official or responder is made aware of an emergency at the facility.**
 - **Other actions that would be undertaken to mitigate the danger in the event of an emergency.**
 - **The most recent inspection report.**

Response: Concur. The Board of Supervisors agrees with and plans to follow the recommendation as an important enhancement to public safety in the County of San Mateo.

- 2. Direct the County Manager to instruct the County Public Works Director to work with appropriate City Departments and the Federal Emergency Management Agency to identify, evaluate and report on the integrity of dams and levees in the County to the Office of Emergency Services/Homeland Security.**

Response: Concur. The Board of Supervisors agrees with the recommendation, and has provided the recommended direction to the County Manager. The Director of Public Works will work with the cities of Belmont, Burlingame, East Palo Alto,

Foster City, Pacifica, Redwood City, San Carlos, San Mateo, and South San Francisco, as well as the special districts in the County with flood control responsibilities to identify levees and dams in their jurisdictions, to review Emergency Action Plans prepared by these organizations, and coordinate provision of these reports to the Office of Emergency Services/Homeland Security (OES/HS). The Department of Public Works will be designated to provide technical assistance to OES/HS as required.



Office Of The
Director of Public Works

CITY COUNCIL 2007

RICHARD A. GARBARINO, MAYOR
PEDRO GONZALEZ, VICE MAYOR
MARK N. ADDIEGO, COUNCILMEMBER
JOSEPH A. FERNEKES, COUNCILMEMBER
KARYL MATSUMOTO, COUNCILMEMBER

BARRY M. NAGEL, CITY MANAGER

September 24, 2007

Hon. John L. Grandsaert
Judge of the Superior Court
Hall of Justice
400 County Center; 2nd Floor
Redwood City, CA. 94063-1655

Re: Emergency Planning for Dam or Levee Failures in San Mateo County Report

Dear Honorable John L. Grandsaert;

Pursuant to the letter received, dated June 28, 2007, from John C. Fitton, Court Executive Officer, for the Superior Court of San Mateo County, the City of South San Francisco responds to the request of the Grand Jury for information pertaining to emergency planning for dam and levee failures in San Mateo County as it relates to the findings and recommendations of the Grand Jury.

The respondent disagrees with all of the findings as they relate to the City of South San Francisco as it does not own or maintain any dams or levees and although it takes no exceptions to the information listed regarding other items within the County, the findings do not pertain to the City.

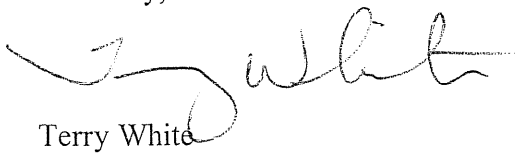
The respondent does not concur with the recommendations of the Grand Jury in that it does not own or maintain any dams or levees and therefore cannot comply with the recommendations. The City of South San Francisco believes that it owns no dams or levees based upon many factors but not limited to the list of dams represented in table 1 of the findings as prepared by the Army Corps of Engineers and a meeting that took place between FEMA Map Modernization Regional Manager, Kathy Schaefer, San Mateo County Public Works Director, James Porter, Ann Stillman, Project Engineer, San Mateo County Flood Control District, and Terry White, South San Francisco Public Works Director on June 28, 2007, to review the FEMA Levee map dated April 20, 2007. In that meeting, after lengthy discussion, it was agreed by Ms. Schaefer that no levees existed in South San Francisco as shown on this map. Those items that had been

given a number, that have been installed over the years by the San Mateo County Flood Control District as maybe “PAL eligible”, were deemed not to be.

We have yet to receive a revised map from FEMA related to this meeting, however, confirmation from the Flood Control District was announced at its September 11, 2007 Advisory Board meeting that it was understood that this may take some time as many other agencies and issues needed to be discussed and investigated before this map could be revised and redistributed.

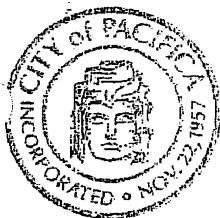
Please feel free to contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Terry White". The signature is fluid and cursive, with a large initial "T" and "W".

Terry White
Director of Public Works

cc: City Manager
City Attorney
City Council



Scenic Pacifica

CITY MANAGER'S OFFICE
TEL (650) 738-7301
FAX (650) 359-6036

CITY ATTORNEY
TEL (650) 738-7409
FAX (650) 359-3647

CITY CLERK
TEL (650) 738-7307
FAX (650) 359-6036

CITY COUNCIL
TEL (650) 738-7301
FAX (650) 359-6038

ENGINEERING
TEL (650) 738-3767
FAX (650) 738-3063

FINANCE
TEL (650) 738-7399
FAX (650) 738-7411

FIRE ADMINISTRATION
TEL (650) 991-0136
FAX (650) 991-8090

HUMAN RESOURCES
TEL (650) 738-7303
FAX (650) 359-6038

PARKS, BEACHES
& RECREATION
TEL (650) 738-7381
FAX (650) 738-2165

PLANNING &
ECONOMIC DEVELOPMENT
TEL (650) 738-7341
FAX (650) 359-5007
• Building (650) 738-7344
• Code
Enforcement (650) 738-7343

POLICE DEPARTMENT
TEL (650) 738-7314
FAX (650) 255-1172

PUBLIC WORKS
TEL (650) 738-3766
FAX (650) 738-9747

CITY HALL

170 Santa Maria Avenue • Pacifica, California 94044-2505

www.ci.pacifica.ca.us

September 24, 2007

The Honorable John L. Grandsaert
Judge of the Superior Court
Hall of Justice, 400 County Center, 2nd Floor
Redwood City, CA 94063-1655

Subject: Grand Jury Report on Emergency Planning for Dam
and Levee Failures in San Mateo County

Dear Judge Grandsaert:

Thank you for the opportunity to respond to the 2006-2007
Grand Jury report, dated June 28, 2007, containing findings and
recommendations related to the Emergency Planning for Dam or
Levee Failures in San Mateo County.

The City agrees with the findings contained in the Civil Grand
Jury report. The City, however, wishes to address the
recommendations as follows:

Recommendation #1 (Paraphrased): In cooperation with the
Office of Emergency Services/Homeland Security, develop,
submit and annually update an Emergency Action Plan for
responding to a prospective dam or levee failure, degradation or
breach.

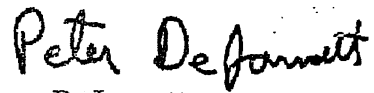
Recommendation #2 (Paraphrased): Work with the County
Public Works Director and with the Federal Emergency
Management Agency (FEMA) to identify, evaluate and report on
the integrity of dams or levees.

Response: The City will not implement both recommendations
because there are no dams or levees existing in the City. The
FEMA map currently shows a levee in Pacifica but this levee
has been removed as part of the Army Corp of Engineers' San
Pedro Creek Flood Control and Wetland Ecosystem Restoration
Project. The City will work with FEMA to update the map. A

copy of the Army Corp of Engineers plan is attached for your convenience.

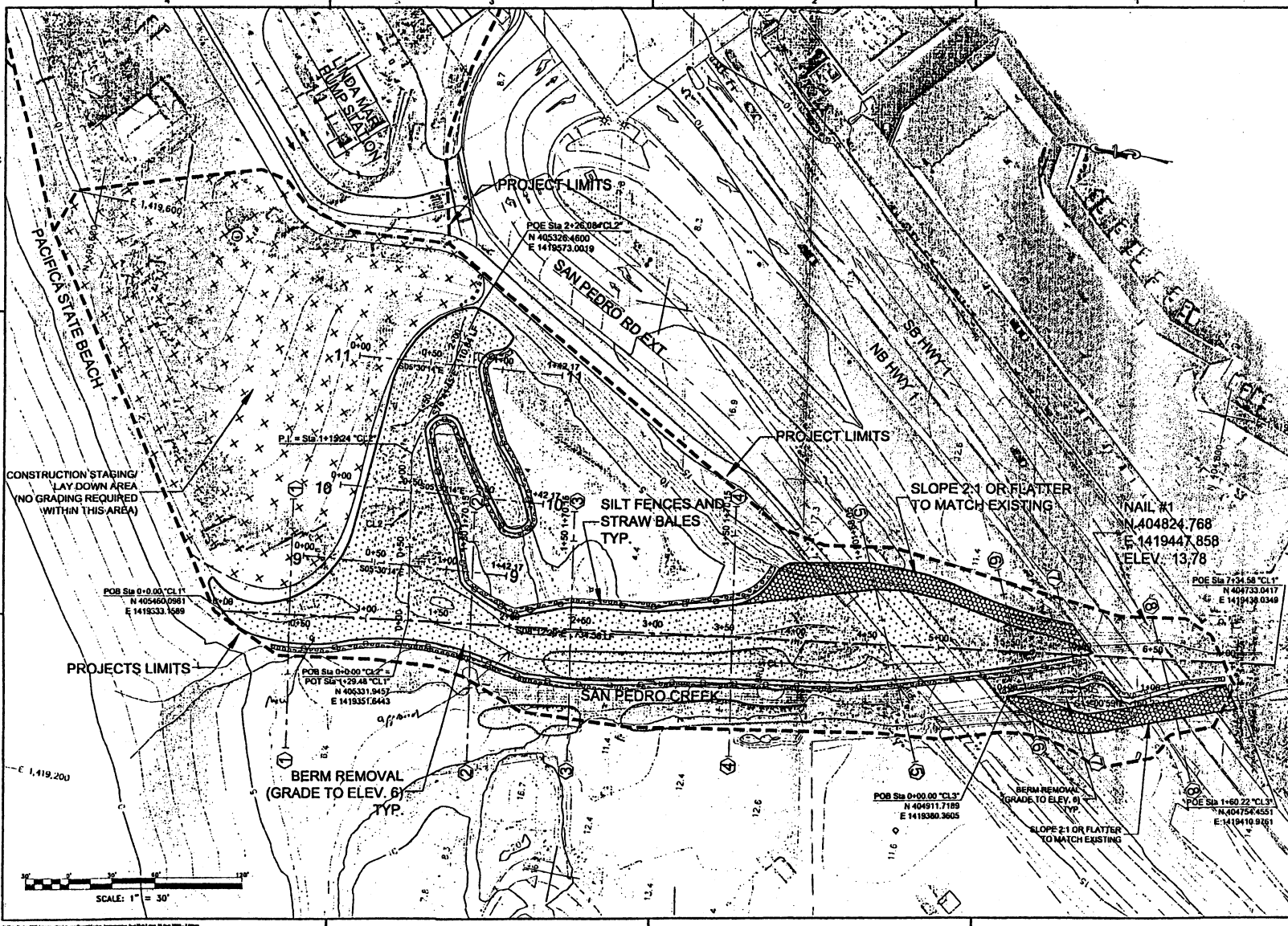
Again, and on behalf of the City Council, thank you for the opportunity to respond on these issues.

Sincerely,

A handwritten signature in black ink that reads "Peter DeJarnatt". The signature is written in a cursive, slightly slanted style.

Peter DeJarnatt
Mayor

Cc: Members, City Council
Stephen A. Rhodes, City Manager




 U.S. Army Corps
 of Engineers
 San Francisco District
 233 Market Street
 San Francisco, CA 94102

CITY OF PALM BEACH
 Department of Public Works
 1000 S. Dixie Highway
 Palm Beach, FL 33480

NO.	DATE	BY	REVISION

PROJECT NO.	DATE	BY	REVISION

MICHAEL BAKER CORP.
 17000 E. 13th Avenue
 Denver, CO 80231

SAN MATEO COUNTY CALIFORNIA
SAN PEDRO CREEK
 FLOOD CONTROL AND WETLAND
 ECOSYSTEM RESTORATION PROJECT
 BERM REMOVAL - LAYOUT PLAN

Sheet
 reference
 number
1



**CITY OF EAST PALO ALTO
OFFICE OF THE CITY MANAGER**

October 18, 2007

Hon. John L. Grandsaert
Judge of the Superior Court
Hall of Justice
400 County Center, 2nd Floor
Redwood City, CA 94063-1655

Re: East Palo Alto's response to 2006-2007 Civil Grand Jury Report


Dear Judge Grandsaert:

Attached is East Palo Alto's response to the 2006-2007 Civil Grand Jury Report, in the following format:

- October 16, 2007 administrative report to the East Palo Alto City Council, containing the Grand Jury reports and the City's proposed responses to each report.

Please be advised that on October 16, 2007, the City Council reviewed and approved the responses to the reports. An electronic version of the City's responses is being sent directly to the Grand Jury at grandjury@sanmateocourt.org.

Very truly yours,


Alvin D. James, City Manager


Attachment: as indicated

cc: City Council
City Attorney



**CITY OF EAST PALO ALTO
OFFICE OF THE CITY MANAGER**

Administrative Report

Date: October 16, 2007
To: Honorable Mayor and Members of the City Council
From: Alvin D. James, City Manager 
Re: 2006-2007 Civil Grand Jury Report: Proposed Responses from East Palo Alto

Recommendation:

Review and accept the proposed responses to the 2006-2007 San Mateo County Civil Grand Jury Report

The 2006-2007 San Mateo County Civil Grand Jury issued three reports related to East Palo Alto:

1. Electronic Communication Among City Officials: A valuable Tool in Need of Careful Guidance
2. Emergency Planning for Dam or Levee Failures in San Mateo County
3. Building in East Palo Alto: Is the Building Permit Approval Process in East Palo Alto Equitable?

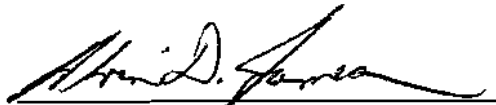
The City is required to respond to the reports. The City Council is required to review and approve the proposed responses.

Attached are the three reports (EXHIBITS 1-3). The proposed responses to electronic communications and dams/levees are contained in separate documents (EXHIBITS 4 and 5). The proposed response to building in East Palo Alto is more complicated, and the proposed response is interspersed in the report for ease of reference (EXHIBIT 6).

Fiscal Impact:

None.

Respectfully submitted,



Alvin D. James, City Manager

EXHIBIT 1. Electronic Communication Among City Officials: A valuable Tool in
Need of Careful Guidance

EXHIBIT 2. Emergency Planning for Dam or Levee Failures in San Mateo County

EXHIBIT 3. Building in East Palo Alto: Is the Building Permit Approval Process in
East Palo Alto Equitable?

EXHIBIT 4. Proposed response to Electronic Communication Among City Officials.

EXHIBIT 5. Proposed response to Emergency Planning Dam or Levee Failures in
San Mateo County

EXHIBIT 6. Proposed response to Building in East Palo Alto

AGENDA ITEM
CITY COUNCIL/REDEVELOPMENT AGENCY
TUESDAY, OCTOBER 16, 2007 ITEM No. VIII.A. 1

POLICY AND ACTION

ITEM: VIII.A.1

**2006-2007 CIVIL GRAND JURY REPORT: PROPOSED
RESPONSES FROM EAST PALO ALTO**

EXHIBIT 2

Emergency Planning for Dam or Levee Failures in San Mateo County



Summary of Emergency Planning for Dam or Levee Failures in San Mateo County

Issue

What improvements can be made within San Mateo County to assure public safety in the event of a dam or levee failure?

Summary

Within the physical boundaries of San Mateo County (County) there are 12 dams listed by government agencies as posing high or significant risk in the event of failure. Furthermore, at least four levees between Brisbane and East Palo Alto are shown on a recent FEMA map as uncertified to withstand a hundred-year flooding event. Failure of certain of these structures could threaten the lives of many thousands of County residents.

The 2006-2007 San Mateo County Civil Grand Jury (Grand Jury) interviewed personnel in the Office of Emergency Services and Homeland Security (OES/HS), a division of the County Sheriff's Office. This agency is responsible for coordinating emergency response within the County including those emergencies that would ensue as the result of a dam or levee failure. Other information came from pertinent newspaper articles and web pages such as those of the Army Corps of Engineers' National Inventory of Dams (NID), the American Society of Civil Engineers, the Federal Emergency Management Agency (FEMA) Flood Map Modernization Program and the Association of Bay Area Governments.

The OES/HS has four parallel methods for notifying citizens facing emergencies such as possible inundation from a dam or levee failure. These methods are: 1) a telephonic emergency notification system, 2) a notification system that contacts registered wireless devices and cell phones, 3) loud speakers/sirens in hazard areas, and finally, 4) street-to-street law enforcement warnings. Although warning methods are in place, the information about dams and levees needed both for planning and to ensure timely

warnings in emergencies is not readily available to OES/HS. Examples of this lack of information are: 1) a lack of Emergency Action Plans (EAP) which are supposed to be prepared by dam and levee operators, 2) inadequate information about the structural integrity of the County's dams and levees, and 3) recent denial of public access to the NID website without a password, and the failure to promptly issue a password as duly requested by OES/HS.

To correct these problems, the Grand Jury recommends that: 1) dam and levee owners be required to prepare Emergency Action Plans and submit them annually to the OES/HS, 2) the OES/HS do what is necessary (without duplicating other information gathering efforts) to gather the information required to assess risk and develop response plans for levee and dam emergencies, and 3) the County Public Works Director work with city and special district public works officials and engineers in the County to evaluate and report on the integrity of dams and levees throughout San Mateo County.

Emergency Planning for Dam or Levee Failures in San Mateo County

Issue

What improvements can be made within San Mateo County to assure public safety in the event of a dam or levee failure?

Background

Earlier in its term, the 2006-2007 San Mateo County Civil Grand Jury (Grand Jury) issued a report on readiness within San Mateo County (County) to respond to a tsunami. While the tsunami study was still fresh in the minds of the Grand Jurors, the New York Times published an Op-Ed piece (see Appendix for references and web sites used as source material) on the poor condition of the nation's dams that aroused the Jury's interest as to the level of preparation within the County for dam failures.

For the purposes of this report, a dam is a barrier used to contain a body of fresh water. When asked about dams, most people in the County think of the one at the Crystal Springs reservoir. However, that dam is only one of eight dams in the County listed as "high hazard" by the Army Corps of Engineers (ACE) in its National Inventory of Dams (NID). High hazard means a probable loss of life should the dam fail, and that it is likely that there will be significant economic losses, environmental damage and human casualties. Another five dams in the County are listed as being of significant risk, where loss of life is not likely, but economic and other losses are. The presence of such dams in the County, combined with the American Society of Civil Engineers (ASCE) finding that in 2005 "... the number of dams identified as unsafe is increasing at a faster rate than those being repaired ..." makes this an important topic, especially in our seismically active area.

During the course of this investigation, it also became apparent to the Grand Jury that levees, which we define here as barriers constructed to contain streams, or keep out the Bay or ocean, may pose a greater danger than dams. The Grand Jury was unable to locate information about the levees in the County as detailed as that found for dams in the NID. As a consequence, this report tends to emphasize dams and treats levees less completely, although levees are no less important.

The County government and the 20 incorporated cities recognized the need for a unified emergency services organization and entered into a Joint Powers Agreement (JPA) more than 30 years ago. The JPA is governed by the Emergency Services Council (ESC), comprised of one representative from each city, and one County Supervisor. The ESC approves budgets and provides strategic direction for emergency response activities in the

County. The cities contribute money to fund the JPA based upon a formula that takes into account the population and average assessed property value of each city. The County then matches the funds contributed by the cities. The ESC budget also includes state and federal Emergency Management Assistance program funds in substantial amounts.

The ESC reviews and recommends emergency plans, programs and agreements for adoption by the Board of Supervisors and city councils in order to carry out the purposes of an emergency services organization. The Office of Emergency Services/Homeland Security (OES/HS) is in the Office of the Sheriff. The OES/HS reports to the ESC, and serves as that agency's emergency services organization. The OES/HS is responsible for minimizing the effects of disasters and major emergencies on the citizens of the County. The OES/HS is responsible for the Emergency Operations Plan (EOP), that describes planned response within the County to extraordinary emergencies associated with natural disasters, man-made technological incidents, and national security alerts.

Investigation

Several information sources were consulted during the course of this investigation. As noted above, the impetus for the investigation was the January 22, 2007 Op-Ed piece in the New York Times by Jacques Leslie, and subsequent discovery of the ASCE website, which grades the nation's infrastructure. The most recent ASCE "report card" gave U.S. dams a D grade, meaning that they were judged to be poor in terms of "*... condition and performance, capacity vs. need, and funding vs. need*"

The Grand Jury then consulted the ACE web site and downloaded NID information for San Mateo County. Access to the NID has been denied to the public since shortly after the Grand Jury obtained information about the dams. The website for the California Department of Water Resources (DWR) Division of Safety of Dams also provided information about the dams in the County. Much of the State information duplicated that found earlier in the NID. (The NID is also available for sale by Investigative Reporters and Editors, Inc., which describes itself as, "a grassroots nonprofit organization dedicated to improving the quality of investigative reporting.") The Federal Emergency Management Agency (FEMA) Flood Map Modernization Program and the Association of Bay Area Governments' (ABAG) websites were also useful sources of information.

Personnel in the San Mateo County Sheriff's OES/HS were interviewed and proved to be very cooperative and extremely valuable sources of information. OES/HS personnel, in turn, contacted a representative of the State DWR Division of Safety of Dams, who was quite responsive in supplying requested information to OES/HS, after which the OES/HS provided the information to the Grand Jury.

Findings

The findings listed below have been grouped into several major topic areas.

Dams in the County

- The Army Corps of Engineers National Inventory of Dams descriptive information for the 12 dams listed as high or significant risk is shown in Table 1

Table 1 Information about dams in San Mateo County listed by the Army Corps of Engineers in the National Inventory of Dams as being of high or significant risk to property and life

Dam name	Type ¹	built	lng. ²	ht. ²	Storage ³	Area	Inspection	Hazard ⁴
Lower Crystal Spr	PG	1888	600	140	57910	1323	12/13/2001	H
Pilarcitos	ER	1866	520	103	3100	109	12/13/2001	H
San Andreas	ER	1870	727	107	19027	550	12/13/2001	H
Laurel Creek	ER	1969	287	40	55	3	09/21/2001	S
Emerald Lk. Low.	ER	1885	280	57	45	4	10/29/2001	S
Scarsville	PG	1890	260	68	952	90	10/11/2001	H
Crocker	ER	1890	200	45	22	2	10/10/2001	H
Spenser Lake	ER	1876	400	87	73	4	10/10/2001	H
Notre Dame	ER	-	210	51	120	8	09/21/2001	H
Bear Gulch	ER	1896	730	61	672	25	11/21/2001	H
Coastways	ER	1951	1000	46	100	9	10/29/2001	S
Pompondo Ranch	ER	1952	245	63	256	13	07/19/2001	S
Rickey	ER	1951	200	64	47	4	10/10/2001	S

Notes: 1. dam type: ER=Rock fill PG=Gravity

2. Length & height: feet

3. Normal Storage: acre-feet

4. Hazard potential: S= significant, no loss of life expected, significant property damage

H=high, probable loss of lives and significant property damage.

Access to information about dams in the County

- When OES/HS personnel tried to obtain National Inventory of Dams information from the Army Corps of Engineers website in April 2007, OES/HS was denied access without a password.
- OES/HS applied for the required password in April 2007, but had not received it by late May 2007.
- As noted earlier, National Inventory of Dams information is no longer publicly available directly from the Army Corps of Engineers, yet it appears to be available from other sources.
- The California Department of Water Resources Division of Safety of Dams inventory is not organized by county, which makes it very difficult to use.

Emergency Action Plans

- The OES/HS recently contacted owners of 19 dams located in San Mateo County that were listed in the National Inventory of Dams (the 19 included some low risk dams); the OES/HS found that none of those dams had an Emergency Action Plan, although the National Inventory of Dams indicated that all the dams listed in Table 1 had such plans.
- A representative of the California Department of Water Resources Division of Safety of Dams told the OES/HS that no Emergency Action Plans are on file for dams in our County, and in fact, there are very few Emergency Action Plans on file for dams located elsewhere in California.
- The California Department of Water Resources Division of Safety of Dams has no authority to require that Emergency Action Plans be prepared by the dam owners.

Dam Inspections

- The California Department of Water Resources Division of Safety of Dams apparently inspects all dams annually, including Crystal Springs Dam, although the National Inventory of Dams lists the last inspection dates for dams as in 2000 or 2001 (See Table 1).

Preparedness

- The OES/HS has maps on file that show areas that would be inundated in case of a failure of the dams listed in Table 1.
- Table 2 lists types of facilities that are in potential inundation zones.

Table 2. Important facilities located in dam inundation zones
(Source: Association of Bay Area Governments, 2004)

Types of facility	Total in County	In inundation zones
HEALTH CARE FACILITIES:	69	15
Hospital	12	2
Long-Term Care Facility	18	2
Primary Care or Specialty Clinic	19	5
Home Health Agency or Hospice	20	6
SCHOOLS:	227	27
Elementary School	160	21
Intermediate, Middle, or Jr. High School	29	3
High School	29	2
Continuation High School	4	0
College or University	5	1
CRITICAL FACILITIES:	615	109
City-Owned	516	104
County-Owned	49	4
Owned by Special Districts	50	1
BRIDGES AND INTERCHANGES:	358	76
Locally-Owned	153	45
State-Owned	205	31

- OES/HS has four parallel methods for notifying citizens of a variety of hazards, including residents facing possible inundation from a dam failure. Those methods are:
 1. The Telephonic Emergency Notification System (TENS) from Dialogic Communications Corporation, which is an Internet-based calling system that rapidly alerts residents in their homes and mobilizes first responders. Phone lists are being generated so that residents living in areas identified on inundation maps can be notified by TENS in the event of an imminent dam or levee failure.
 2. A voluntary notification system from Roam Secure, Inc. that contacts wireless devices such as personal digital assistants (PDA) and cell phones of those who have registered with OES/HS. This system is being implemented.
 3. Loud speakers/sirens in hazard areas such as inundation zones.
 4. Street-to-street law enforcement warnings.
- Although the OES/HS is responsible for emergency planning and mitigation, it has no authority to mandate that dam owners prepare Emergency Action Plans.
- The role of the OES/HS is largely that of a coordinating agency rather than a responder.
- Cities and special districts are responsible for making sure that the OES/HS is given the information it needs to coordinate emergency response.
- OES/HS cannot effectively plan for dam failures without emergency action plans, but dam owners are not required by law to prepare these plans or provide them to OES/HS.
- State and Federal statutes provide the framework for coordination of emergency responses. The OES/HS deals with the State and the State deals with the Federal agencies such as Federal Emergency Management Agency.
- When the Federal Emergency Management Agency becomes directly involved in an emergency at the local level, there is direct contact between the OES/HS and that Federal agency.
- OES/HS considers participation in mock disaster drills put on by various local, state and federal agencies to be important, and dam and levee owners do not participate in these exercises.

Levees

- Emergency officials have estimated, based on numbers of dwellings in areas that would be flooded, that there is a potential for the loss of tens of thousands of lives should certain levees fail catastrophically.
- OES/HS officials are very concerned about the disaster potential of levees.
- At least four levees between Brisbane and East Palo Alto are shown on a recent Federal Emergency Management Agency map (available for download from Federal Emergency Management Agency Region IX Flood Map Modernization Program web site listed in the appendix) as uncertified to withstand a hundred-year flooding event.

- The County Department of Public Works has a detailed list of levees in the County.
- The Federal Emergency Management Agency is currently gathering information for two County levees for which there is insufficient information to assess risk.
- Most levees in San Mateo County are city properties, but some are owned by the County, some by the State, some by corporations, and one is owned by the City of San Jose.
- Maintenance of some levees owned by cities within the County is reputed to be inadequate and those levees may pose a high risk.
- Apparently, cities and special districts have no authority to request other levee owners in their jurisdictions to take actions such as preparing Emergency Action Plans.
- Some repairs were recently completed on East Palo Alto levees that had been damaged by a series of heavy rains and high creek volumes in January 2006.
- Levees are not listed in the State list of dams and therefore may not be required to have Emergency Action Plans.

Conclusions

Based on the above findings, the Grand Jury concludes that:

- The potential for loss of life in the event of a catastrophic dam or levee failure is great, running into the tens of thousands of lives.
- The OES/HS is generally well prepared to coordinate an appropriate emergency response for citizens in identified inundation zones provided timely information is received about a threat from a dam or levee.
- The OES/HS has little authority to require that dam and levee operators provide all the information necessary for it to prepare adequately.
- The lack of plans prepared by dam and levee operators poses a significant danger to those living in inundation zones.
- The State of California's information about dams and levees in San Mateo County (and in the State as a whole) is inadequate for planning for responses to emergencies.
- The sharing of information about dams and levees among facility operators, cities, the County and the OES/HS is insufficient for emergency preparedness planning.
- Dam and levee owners should participate in county-wide mock disaster drills.

Recommendations

The Grand Jury recommends that the Emergency Services Council:

1. Authorize and fund, by December 31, 2007, the Office of Emergency Services/Homeland Security to work with other entities in our County to acquire whatever information is necessary to assess risk and develop response plans for levee and dam emergencies. This effort should use all available information, including that collected by the Federal Emergency Management Agency, to formulate plans specific to our County and to incorporate those plans into the Office of Emergency Services/Homeland Security countywide Emergency Operations Plan by July 31, 2008.
2. Adopt a resolution by December 31, 2007, requesting all jurisdictions – whether County, City, Special District, or private entity – having authority or responsibility for dam or levee integrity cooperate with the Office of Emergency Services/Homeland Security to develop credible emergency plans for responding to dam failure and levee degradation or breach.

The Grand Jury recommends that the Sheriff instruct the Office of Emergency Services/Homeland Security to:

1. Cooperate with affected cities and dam and levee owners to develop credible Emergency Action Plans by March 31, 2008, for responding to a prospective dam or levee failure, degradation or breach. These Emergency Action Plans should be prepared and submitted immediately upon completion to the Office of Emergency Services/Homeland Security, followed by annual updates. An Emergency Action Plan would include at least the following information:
 - A list of three or more separate telephone contacts to insure that at least one responsible official or responder is made aware of an emergency at the facility
 - Other actions that would be undertaken to mitigate the danger in the event of an emergency
 - The most recent inspection report
2. Cooperate with Cities, the County Public Works Director and with the Federal Emergency Management Agency to identify, evaluate and report on the integrity of dams and levees in the County.

The Grand Jury recommends that the city councils of Belmont, Burlingame, East Palo Alto, Foster City, Pacifica, Redwood City, San Carlos, San Mateo and South San Francisco do the following:

1. Cooperate with the Office of Emergency Services/Homeland Security to develop credible Emergency Action Plans by March 31, 2008, for responding to a

prospective dam or levee failure, degradation or breach. These Emergency Action Plans should be prepared and submitted immediately upon completion to the Office of Emergency Services/Homeland Security, followed by annual updates. ~~An Emergency Action Plan would include at least the following information:~~

- A list of three or more separate telephone contacts to insure that at least one responsible official or responder is made aware of an emergency at the facility
 - Other actions that would be undertaken to mitigate the danger in the event of an emergency
 - The most recent inspection report
2. Direct the appropriate City department to work with the County Public Works Director and with the Federal Emergency Management Agency to identify, evaluate and report on the integrity of dams and levees in the County.

The Grand Jury recommends that the County Board of Supervisors:

1. Adopt a resolution to encourage all jurisdictions to cooperate with the Office of Emergency Services/Homeland Security to develop credible Emergency Action Plans by March 31, 2008, for responding to a prospective dam or levee failure, degradation or breach. These Emergency Action Plans should be prepared and submitted immediately upon completion and be followed by annual updates. The Emergency Action Plans would include at least the following information:
- A list of three or more separate telephone contacts to insure that at least one responsible official or responder is made aware of an emergency at the facility
 - Other actions that would be undertaken to mitigate the danger in the event of an emergency.
 - The most recent inspection report.
2. Direct the County Manager to instruct the County Public Works Director to work with appropriate City Departments and the Federal Emergency Management Agency to identify, evaluate and report on the integrity of dams and levees in the County to the Office of Emergency Services/Homeland Security.

Appendix: Source material used for this report

Text documents

1. Albach, B., 2007: Work wraps up on damaged East Palo Alto Levees, *Palo Alto Daily News*, May 10, 2007.
2. American Society of Civil Engineers, 2003: 2003 Progress Report, *An Update to the 2001 Report Card for America's Infrastructure*, ASCE, 7 pp.
3. Federal Emergency Management Agency, 2007: *Letter to Community Floodplain Administrators in San Mateo County requesting Existing Certification Documents for Levees Recognized on Effective Flood Insurance Rate Maps* - letter dated January 23, 2007
4. _____, 2007: *San Mateo County Levee Status*, Map created April 20, 2007 by Michael Baker Jr., Inc.
5. _____, 2007: *San Mateo County Levee Status*, Table created April 20, 2007 by Michael Baker Jr., Inc.
6. Leslie, J., 2007: Before the Flood, *New York Times*, Op-Ed Page, January 22, 2007.
7. San Mateo County (California) Civil Grand Jury, 2006-2007: *Tsunami Alert and Evacuation on the San Mateo County Coast*, 11 pp.
8. San Mateo County (California) Civil Grand Jury, 2005-2006: *When the Big One Comes Will We Respond with a Bang or a Whimper?*, 40 pp.

Websites

9. American Society of Civil Engineers (ASCE) report card, <http://www.asce.org/reportcard/2005/page.cfm?id=23>
10. Army Corps of Engineers, National Inventory of dams. <http://crunch.tec.army.mil/nid/webpages/nid.cfm>
11. Association of Bay Area Governments. <http://www.abag.ca.gov/levees.html>
12. California Department of Water Resources, Division of Safety of Dams, <http://damsafety.water.ca.gov/>
13. Flood Map Modernization Program, Federal Emergency Management Agency Region IX, http://rnc.mapmodteam.com/rnc9/San_Mateo.htm#Levee

14. Investigative reporters and editors, Inc.,
http://www.ire.org/inthenews_archive/damresources.html
15. San Mateo County Civil Grand Jury 2006-2007, published reports,
<http://www.sanmateocourt.org/director.php?filename=/grandjury/2006/index.php>
16. San Mateo County Civil Grand Jury 2005-2006, published reports,
<http://www.sanmateocourt.org/director.php?filename=/grandjury/2005/index.php>
17. Office of Emergency Services/Homeland Security,
http://www.co.sanmateo.ca.us/smc/department/home/0,,14095463_14132044_59210022,00.html

EXHIBIT 5

Proposed response to Emergency Planning Dam or Levee Failures in San Mateo County

2. Emergency Planning for Dam or Levee Failures in San Mateo County

Response to Findings:

- a. Respondent East Palo Alto agrees with the findings

Response to Recommendations:

- a. The recommendation requires further analysis, including consultation with the county Office of Emergency Services/Homeland Security regarding the feasibility of developing credible Emergency Action Plans by March 31, 2008; and
- b. The recommendation to direct an appropriate City department to work with the county Public Works Director and the Federal Emergency Management Agency to identify, evaluate and report on the integrity of dams and levees in the County has not been implemented but will be implemented by December 31, 2007.