

# The Annual Flooding of Pescadero Creek Road

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### Issue

For over 25 years the main road into Pescadero has been blocked by the annual flooding of Butano Creek, jeopardizing public safety and impeding access by public safety officers and medical responders into and out of the Pescadero community. Why has the County not resolved this problem and how can it finally be fixed?

## **Summary**

The blockage of Pescadero Creek Road, in the unincorporated community of Pescadero, happens one or more times each rainy season, often for days each time. Flooding jeopardizes the safety of local citizens in two primary ways: First, alternative routes into the Pescadero area are along much longer, narrower roadways requiring at least two to three times more driving time from the coastal highway. In the case of emergencies where the San Mateo County Sheriff, CAL FIRE or the California Highway Patrol is required, response time is critical and delays can impact personal safety of citizens and their property. Second, as the road floods, there are always some individuals who deliberately or inadvertently drive through the flooded road areas, sometimes successfully, sometimes not. A flooded road impacts local commerce, tourist traffic, and agribusiness in the area, and often leaves debris and silt to clean up.

The flooding is linked to decades of silt accumulation in the streambed, and excess vegetation growth and debris build-up along Butano Creek and in Pescadero Marsh. The drainage from the Marsh into the sea, and associated flushing of silt into the sea, is compromised by natural and man-made changes. These include logging debris, erosion, run-off, levees and channels built to facilitate agriculture, as well as certain now-abandoned modifications intended to correct watershed problems. The bottom line is that rains cannot be contained within Butano Creek's banks, resulting in predictable and dangerous road flooding.

The San Mateo County Civil Grand Jury recommends the removal of excess silt and clearance of vegetation overgrowth and debris from as much of the Butano Creek as necessary to eliminate the road flooding by October 1, 2012, before the 2012/2013 rainy season, using the regulatory framework of "Emergency" action if necessary.

## **Background**

Since the 1880s, the town of Pescadero, population ~650, has been a farming and ranching community. The town is located at the upstream (eastern) edge of Pescadero Marsh, at the confluence of Pescadero and Butano Creeks, both of which empty into the Pacific.

The flooding of the Pescadero Creek Road at the Butano Creek Bridge closes the main route into and out of Pescadero, while simultaneously inundating privately owned farmlands. The road closure isolates the town and surrounding areas from its CAL FIRE Station, severely impacting emergency services. Alternate roads are small and winding through local hills. An ambulance, fire engine, or police vehicle could require an extra hour or more in transit time. In recent years, flooding has occurred several times during the rainy season, often for 24-48 hours at a time.

Several sources document the history and complexities of the Pescadero watershed. <sup>1</sup> The cause of the annual flooding includes progressive silt accumulation and vegetation overgrowth and debris build-up in Butano Creek up- and down-stream of the Bridge and beyond into the Marsh itself. Additionally, numerous property owners decades ago created levees and channels in the marsh for their land-uses, and several projects for the Coastal Highway have modified the seasonal sand-berm that affects the Butano Creek's flow from the Marsh to the Ocean. State regulations enacted beginning in the 1960s have prevented property owners from dredging and clearing creeks on their property and opening the sand-berm as they had historically done.<sup>2</sup>

Survey profiles demonstrate the silt build up. (*See*, Attachment A.) The streambed was ~12 feet below the bottom of the bridge in 1968.<sup>3</sup> Currently the bridge clears the silted creek bottom by only two feet. The creek has no capacity to handle rainstorm run-off; the water has nowhere to go but up and over the road.

The California Department of State Parks and Recreation began acquiring Marsh properties in the 1960s, and in 1993 started to implement extensive modifications to the Marsh area intended to address and resolve environmental concerns<sup>4</sup>. Modifications included adding and removing dikes, adding water-control gates and culverts, and re-contouring certain flow features. The added features were not maintained, and were subsequently abandoned.<sup>5</sup> The reasons for this abandonment have not been identified. As a result, silt-up and vegetation overgrowth has reduced the capacity and impeded the water flow in the Creek. Fish-kills within the Marsh have also increased; agribusiness has suffered; sport fishing has all but disappeared; and negative effects on endangered wildlife are being documented.<sup>6</sup>

Interviewees from local citizens' groups including the Pescadero Municipal Advisory Group (PMAC), the California Alliance for Species Enhancement (CASE), and the San Mateo County Farm Bureau have stated that State Parks' modifications have exacerbated the flooding. Scientists are mostly in agreement. For many years, citizens' groups have advocated County and State

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<sup>&</sup>lt;sup>1</sup> IDC, from Sans, Director DPW, to San Mateo County Planning Commission May 8, 1992, "Flooding of Butano Creek at Pescadero Road", and to Pescadero Community Council Nov 10, 1992; Pescadero-Butano Watershed Assessment, Final Report March 5, 2004, Environmental Science Associates.

<sup>&</sup>lt;sup>2</sup> See, e.g., California Fish and Game Code §§ 1600-1602.

<sup>&</sup>lt;sup>3</sup> See, Attachment A, "Silt-up Profiles."

<sup>&</sup>lt;sup>4</sup> Website, C.A.S.E., caseforourenvironment.org, August 2011, Example of Jerry Smith's 201995/6 SJSU studies, prepared for State Parks.

<sup>&</sup>lt;sup>5</sup> Interview, Biologist, NOAA / Fisheries.

<sup>&</sup>lt;sup>6</sup> Website, C.A.S.E, caseforourenvironment.org, Conditions in Pescadero Marsh, Lennie Roberts report, 2004.

<sup>&</sup>lt;sup>7</sup> Interview, scientist, California Dept. of Fish and Game.

action to provide relief from the flooding, and have proposed some immediate fixes. These included: dredging the streambed; raising the roadway at the bridge and especially at the low-point of the road; building a causeway and/or; installing a pump to move water from the upstream side of the bridge to a point downstream. None of these proposals have been implemented.

Permitting complexities can be additional barriers to immediate and broader County action. However, the Grand Jury is unaware that the County has actually applied for, or has been denied, any permits to address the road-flooding problem. The entities involved in permitting and advising permit issuance include State Parks, State Fish and Game, U.S. Fish and Wildlife Service, the Coastal Commission, and many others. (See, Attachment B: San Mateo County Public Works Permitting Flowchart.) A November 2010 letter from NOAA's National Marine Fisheries Service (NMFS) to California State Parks and Recreation and San Mateo County Public Works states that dredging may be a feasible solution to local road flooding, as well as alleviating the now encumbered fish passage (salmonids) until more extensive Marsh ecosystem recovery work is completed. It also advises that dredging permits from the State (if necessary) should not be a hindrance and that NOAA stands ready to work with State Parks and the County on such an effort. (*See*, Attachment C: NOAA letter to California State Parks and San Mateo County Dept. of Public Works.)

The responsibility for Pescadero Creek Road and its maintenance belongs to San Mateo County Public Works. Public Works is also responsible for a 30-ft right-of-way on either side of the road. Silt re-deposition, vegetation overgrowth, and debris collection likely would require limited periodic clearing and clean-up efforts in future years. From interviews, the Grand Jury learned that action has not been taken in part because of other priorities, political and jurisdictional disputes with other levels of State and Federal government as well as potential permitting complexities.

County officials and advisors have discussed the concept of "Emergency" public works action with the Grand Jury. The concept of "Emergency" action applies in two distinct circumstances. One is the declaration of a state of emergency by either a local government or the state, such as in 2010 when the San Bruno gas line exploded. The other involves conditions in which a local governmental entity, such as San Mateo County Public Works, can take emergency action to resolve an issue without the need to obtain prior permits to approve such actions. The permits in both circumstances may be resolved after the fact. Typically, Public Works has taken immediate action when necessary to repair roads/access due to slip-outs, rock-falls, flooding, under emergency authority, with permitting/remediation resolved after the fact.

California Government Code §21060.3 defines "Emergency" as a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. "Emergency"

<sup>&</sup>lt;sup>8</sup>Attachment B, Letter, NOAA / Fisheries to Public Works, and State Parks, November 24, 2010.

<sup>&</sup>lt;sup>9</sup> CEOA Cal Government Code §21060.3; Cal. Code of Regulations, §15269 (d).

includes such occurrences as fire, flood, earthquake or other soil or geologic movements, as well as such occurrences as riot, accident or sabotage.

The California Code of Regulations §15269 (Title 14, Ch. 3, Art. 18), Emergency Projects, exempts a series of emergency project types from the requirements of the California Environmental Quality Act (CEQA). Among them are:

(c) Specific actions necessary to prevent or mitigate an emergency. This does not include long term actions undertaken for the purpose of preventing or mitigating a situation that has a low probability of occurrence in the short-term.

In addition to the California Government Code reference cited above, there are other emergency provisions for waiving permits, allowing immediate actions to address issues of protecting life and public property from imminent danger, including fill and dredging activities under emergency conditions. Applicable references include:

- California Coastal Act: Public Resources Code § 30611 Emergencies; waiver of permit
- Local Coastal Program: SMC Local Coastal Program 9.15 Emergency Provisions
- US Army Corps of Engineers Regional General Permit 5 (emergency defined according to CEOA)<sup>10</sup>
- California Dept. of Fish and Game Code §1610 (a)(b)<sup>11</sup>

Road flooding is one symptom of a deteriorating Marsh watershed. An integrated overall plan is necessary to identify engineering actions needed to address all the interactive elements of the Pescadero Marsh ecosystem. One initiative to develop an overall solution is now underway by the Resource Conservation District (RCD), chartered to advise the County on conservation and environmental issues. The RCD is a Special District of California and is appointed by and advisory to the San Mateo County Board of Supervisors. The RCD obtained funding in 2011 to conduct a study to explore lasting solutions for the Marsh watershed, including resolution of the road-flooding problem. The elapsed time for the RCD research study plus the resulting actual project work will take at least 5 years.

# Investigation

To investigate Pescadero Creek flooding, the San Mateo Civil Grand Jury took site tours, reviewed documents and reports, and conducted interviews with Federal, State and County government personnel, and scientific and citizens' groups, including:

- · San Mateo County Board of Supervisors
- · San Mateo County Public Works
- · San Mateo County Resource Conservation District (RCD)
- · California State Fish and Game Department

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http://www.spn.usace.army.mil/regulatory/RGP/28218s.pdf and http://ceres.ca.gov/ceqa/stat/Ch 2-5.html.

<sup>11</sup> http://www.dfg.ca.gov/habcon/1600/1600code.html.

- · National Oceanic and Atmospheric Administration (NOAA / Fisheries)
- · Committee for Green Foothills
- · San Mateo County Farm Bureau
- · Citizens Against Species Extinction (C.A.S.E.)
- · Pescadero Municipal Advisory Council (PMAC)

Note that the Grand Jury attempted to interview two individuals from California State Parks and Recreation, the agency that owns the Marsh and is responsible for its management. The individuals first agreed, then later declined through their lawyers, to provide informational interviews to the Grand Jury on the subject of this Report. After substantial delay, the State's lawyers subsequently claimed that State Park and Recreation has "...very little specific knowledge about the impacts, the causes, or the responsibility for the flooding" and therefore would not allow its clients to be interviewed (even when written questions were tendered in advance). The Grand Jury is disappointed in the lack of cooperation and surprised by the claimed ignorance on the part of the public agency directly responsible for managing the Marsh. For the record, the Grand Jury considers the issuance of this Report to be only part of an open and continuing investigation of matters relating to road flooding, Butano Creek, and the Pescadero Marsh. The Grand Jury expressly reserves its right to request that a subpoena issue from the Superior Court compelling the attendance of and/or production of records before the Grand Jury from any witness. The Grand Jury continues to evaluate whether such steps are required in this matter.

Reference documents reviewed included public records and reports, relevant websites, County engineering and scientific documents and reports, and documents provided by or referenced by the interviewees.

Site tours included several walk-arounds of Butano Creek (at and around the Bridge) and the Marsh and its tributary creeks, as well as the estuary exit sand-berm along the coast.

# **Findings**

The Grand Jury finds:

- 1. The Butano Creek overflows its banks and floods Pescadero Creek Road and surrounding farmland each year during periods of rains.
- 2. The flooding of Pescadero Creek Road at Butano Creek Bridge creates a dangerous setting and, when impassable, delays public safety access and virtually isolates a Pescadero community of approximately 650 people.
- 3. Silt accumulation, vegetation overgrowth, and debris have reduced flow capacity of Butano Creek and increased road flooding risk.
- 4. Butano Creek has not been thoroughly cleared of accumulated silt, vegetation overgrowth, or debris for decades.

- 5. California State Parks and Recreation, beginning in 1993, made extensive modifications in the Marsh to re-establish a "natural ecological environment." Some modifications have not been maintained (e.g., flood gates) and, according to several interviewees, are presently ineffective and have made road-flooding conditions worse.
- 6. Solutions proposed to San Mateo County Public Works to correct the flooding include a raised roadway or a causeway, over-road pumping, dredging, and brush and debris clearance. The County has not adopted any of these suggestions.
- 7. San Mateo County is responsible for maintaining Pescadero Creek Road and its 30-foot right of way and therefore for correcting the road-flooding situation.
- 8. Multiple agencies, each with its own specific interests, might normally have to approve or advise on approval of permits to make changes that would resolve the flooding problem. Currently, any one agency could stop the process.
- 9. Multiple sections of California and federal law, e.g. California Fish and Game Code §1601, CEQA, CA Gov't Code §21060.3, and Cal. Code of Regs. §15269(d), provide for emergency exceptions to the permitting restrictions that normally apply to stream bed changes and road repairs. These may be available to Public Works to expedite actions that would eliminate Pescadero Road flooding.
- 10. The Grand Jury is unaware that the County has ever applied for, or been denied, any permit(s) for actions that would address the road flooding.
- 11. A November 24, 2010 letter from the NOAA's National Marine Fisheries Service (NMFS) North Central Coast Office to California State Parks and San Mateo County Public Works expressed the view that the permits required to address the road flooding should not be a hindrance and that "NMFS stands ready to work with State Parks and the County toward the shared goal of resource protections while improving the safety of Pescadero Road."
- 12. The Resource Conservation District has funding to explore solutions to environmental quality issues in the Pescadero Marsh ecosystem and intends to address Pescadero Creek Road flooding as part of its efforts. Its time frame, however, does not address the immediate need.

## **Conclusions**

The Grand Jury concludes:

- 1. The status quo of annual road flooding is unsafe and unacceptable. The annual flooding of the main road serving Pescadero seriously jeopardizes citizens' safety, and impedes commercial activity in the area.
- 2. The diminishing capacity of the Butano Creek due to accumulated silt, vegetation

overgrowth, and debris increases the risk of flooding with lesser rainfall. This annual flooding is predictable and correctable.

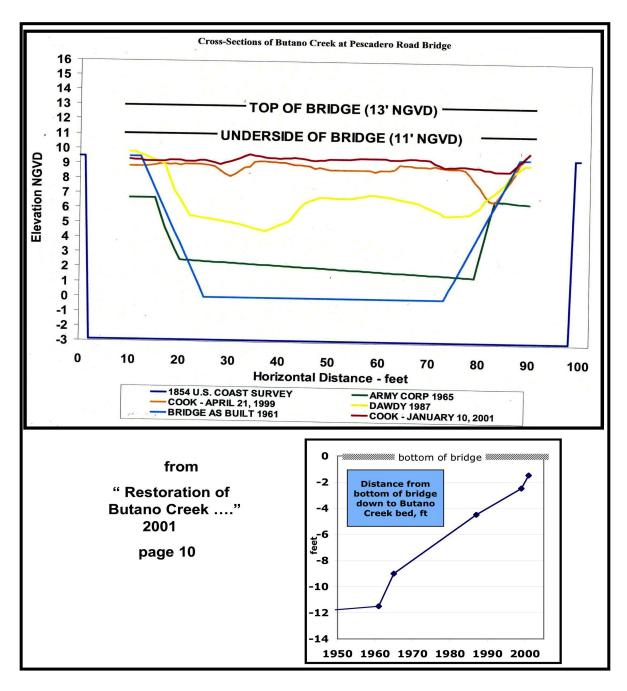
- 3. The Board of Supervisors and responsible County government entities are essentially nonresponsive, hampered by other priorities, jurisdictional disputes with various State and Federal agencies, permitting requirements, and insufficient political will to overcome these.
- 4. The difficulty of obtaining approval of permits to address road flooding cannot be substantiated because, to the Grand Jury's knowledge, none have ever been applied for, or denied.
- 5. The Grand Jury believes that the County could invoke the "emergency repair" concept, take remedial action, and immediately end the Pescadero Creek Road flooding.
- 6. The estimated five years timing for any flood-control relief resulting from RCD's efforts is unacceptable.
- 7. Immediate solutions to road flooding must be implemented. The most promising include removal of excess silt and clearance of vegetation overgrowth and debris from as much of the Butano Creek as necessary to eliminate the annual road flooding.

#### Recommendations

The Grand Jury recommends that the Board of Supervisors:

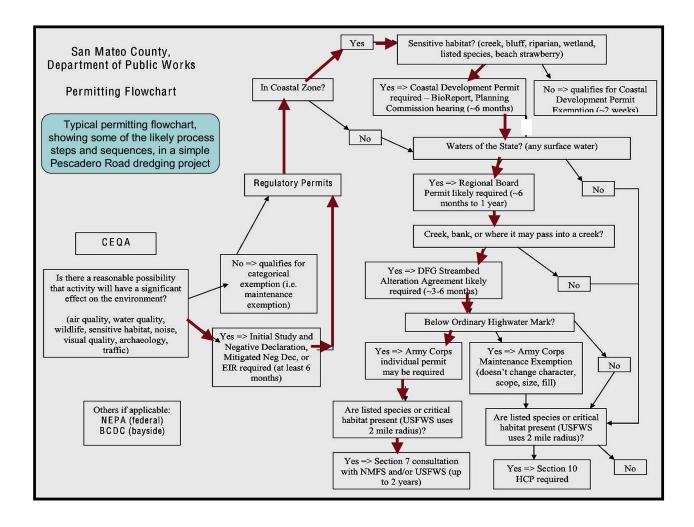
- 1. Immediately direct the County Department of Public Works to remove excess silt and clear vegetation overgrowth and debris from as much of the Butano Creek as necessary to eliminate the road flooding. The work should be completed as soon as possible, and in all circumstances before October 1, 2012, the start of the 2012-13 rainy season. The intended result of this work is to prevent flooding of Butano Creek onto and around Pescadero Creek Road and farmlands.
- 2. Review the NOAA (NMFS) Nov 24, 2010 letter (*See*, Attachment B), and consult with NOAA and the San Mateo County RCD on strategies for expediting permit approvals, if any are required, to accomplish the work described in Recommendation 1.
- 3. If needed to accomplish Recommendation Number 1, use San Mateo County's authority under the various emergency provisions of California and/or federal law to take actions mitigating flooding to protect life or property.
- 4. Direct the San Mateo County Department of Public Works to periodically clean new silt, vegetation overgrowth, and debris from Butano Creek as needed to maintain flows and eliminate the recurrence of Pescadero Creek Road flooding.

## **Attachment A: Silt-up Profiles of Butano Creek Bridge**



This image shows the profile of the Butano Creek streambed below the Pescadero Creek Road Bridge. Early surveys show the streambed some 12 feet below the bottom of the bridge. Today, the bridge clears the silted and debris-filled creek bottom by only 2 feet.

# Attachment B: San Mateo County Public Works Permitting Flowchart



This flowchart, prepared by the San Mateo County Department of Public Works, illustrates the path and sequence for obtaining permit approval for relatively straightforward projects. It does not show the additional entities that, as a matter of course, provide technical input and guidance to the indicated permitters.

#### Attachment C: NOAA / Fisheries Letter



#### UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE PISHERIES SERVICE Southwest Region

November 24, 2010



Joanne Kerbavaz, Senior Environmental Scientist California State Parks 95 Kelly Avenue Half Moon Bay, California 94019 Joe LoCoco, Deputy Director, Road Service County of San Mateo Department of Public Works 752 Chestnut Street Redwood City, California 94063

Dear Mr. LoCoco and Ms. Kerbavaz:

This letter is in response to the existing channel conditions in Butano Creek beneath and adjacent to the Pescadero Road bridge, near the town of Pescadero, San Mateo County, California.

NOAA's National Marine Fisheries Service (NMFS) is concerned existing channel conditions may be affecting federally listed salmonids and their habitat. The County of San Mateo Department of Public Works (County) is responsible for maintenance activities at the Pescadero Road bridge. Butano Creek flows into the Pescadero Marsh Natural Preserve which is owned and managed by the California Department of Parks and Recreation (State Parks).

When the bridge was constructed in 1961, the channel underneath the bridge was approximately 11 feet deep and 80 feet wide. Over the years, approximately 9 feet of silt has built up in the channel, reducing the vertical clearance underneath the bridge to about 2 feet. This has resulted in an increase in the frequency of flooding and may be impairing fish passage.

During large storm events, Butano Creek cannot be contained within its banks at the bridge and floodwaters spill onto Pescadero Creek Road and adjoining properties. Under existing conditions, maintenance activities at the bridge that do not include work within the actual creek channel are unlikely to alleviate flood concerns and may continue to impede passage for listed salmonids. We believe there are possible near-term and long-term solutions that would minimize flooding along Pescadero Creek Road, allow for some level of maintenance, and improve fish passage. Dredging, for example, may have only short-term benefits to flooding and fish passage, but could be an interim plan until a long-term solution is reached. We urge the County to coordinate with State Parks, NMFS, and other appropriate stakeholders to investigate both short and long-term solutions for flooding issues with the assurance of fish passage.

It is our understanding, opportunities for the County to conduct these activities may be limited for a variety of reasons, including access onto State Parks property. Although State Parks is not a flood control agency, this should not preclude the agencies working collaboratively on how to address resource protection while improving the safety of Pescadero Road.

We acknowledge permits will be required but do not see this as a hindrance to a solution. Fish passage improvement and channel maintenance activities are the types of projects which are regularly permitted by the appropriate agencies and NMFS routinely consults with Federal action agencies pursuant to the Federal Endangered Species Act. NMFS stands ready to work with State Parks and the County towards the shared goal of resource protection while improving the safety of Pescadero Road.

If you have questions or concerns regarding this letter please feel free to contact Mr. William Stevens of my staff at (707) 575-6066 or via email at William.Stevens@noaa.gov.

ce: Chris Yates, NMFS, Long Beach Patrick Rutten, Kit Crump, NOAA Restoration Center, Southwest Region Paul Keel, California Department of Parks and Recreation, Half Moon Ba Eric Larsen, California Department of Fish and Game, Younville Rich Gordon, San Mateo County Board of Supervisors, Redwood City Dick Butler

North Central Coast Office Supervisor Protected Resources Division

Protected Resources Division

This letter from Mr. Butler of NOAA/Marine Fisheries, dated November 24, 2010, summarizes the silt-up of the Butano Creek streambed and its association with the annual Pescadero Road flooding. It acknowledges the potential interim benefits of dredging. It urges the County to coordinate with stakeholders to investigate solutions and provides guidance and offers support in overcoming permitting issues. (highlights supplied).