Chief Executive Officer, Town of San Anselmo Chief Executive Officer, Town of Ross Marin County California

RE: Freeboard and Mitigation of Properties Due to BB2

I think there is a significant issue not being considered in respect to structures in areas that will bear an increase in flood levels and the need for mitigation of the rise of flood waters: "Freeboard"

The term is from watercraft where the height from the top of the water to the lowest outer edge of the boat, that distance is freeboard.



Imagine being in a small rowboat and things being lovely and then two sumo wrestlers get in with you. The reduced freeboard would be of **immediate concern** as the water could pour in the edges of the boat.

In respect to flood water in the Ross Valley, new construction freeboard is the distance from the top of flood water plus 12 inches. For an existing building it varies by the height of the first floor level to the flood level. Freeboard is defined on the FEMA website:

https://www.fema.gov/about/glossary/freeboard#:~:text=Freeboard-,a.,or%20community%20floodplain%20management%20regulations

Freeboard

a. An additional amount of height above the Base Flood Elevation used as a factor of safety (e.g., 2 feet above the Base Flood) in determining the level at which a structure's lowest floor must be elevated or flood proofed to be in accordance with state or community floodplain management regulations.

The explanation of the reason for this is long but entirely reasonable: Things happen, we need a factor of safety, that form of protection is freeboard. I underline specifics of interest.

b. Freeboard is a <u>factor of safety</u> usually expressed in feet above a flood level for purposes of floodplain management. "Freeboard" tends to <u>compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, <u>bridge openings</u>, and the hydrological effect of urbanization of the watershed. Freeboard is not required by NFIP standards, but communities are encouraged to adopt at least a one-foot freeboard to account for the one-foot rise built into the concept of designating a floodway and the encroachment requirements where floodways have not been designated. Freeboard results in significantly lower flood insurance rates due to lower flood risk.</u>

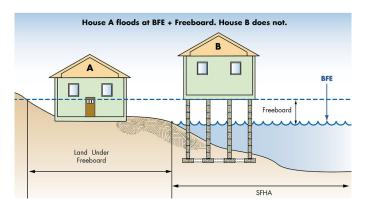
Other definitions include that this factor of safety also allows for some aspect of climate change or storms greater than the 100 year event.

Consider this:

- If you and I owned an existing house that is above the 100 year flood level by say, 10 inches and
 the Flood District stopped by and said they were going to increase the flood waters by 3-4 inches,
 we would have the reasonable interpretation that they were reducing our freeboard, reducing
 our factor of safety, reducing the protection of unknown factors like debris blocking bridges etc.
 We all own our freeboard, large or small. We would tell them that they simply cannot take our
 freeboard without mitigation. FEMA states that freeboard is considered in insurance rates. It's a
 very, very real asset.
- If you and I owned a house that had a 100 year flood level that was say 4 inches above the floor and the Flood District stopped by and said they were going to increase the flood waters by yet another 3-4 inches, we might scratch our head and say how can they do that? We could look at it another way: If a say, a 70 year storm flood level was 2 inches below our floor, then the 4 inch rise would result in flooding of our house. A loss that would not otherwise happen. A very real loss. We would tell them that they simply cannot take our freeboard without mitigation. FEMA states that freeboard is considered in insurance rates. It's not something that can be simply taken away from a homeowner and given as a benefit to others.

It's wonderfully complex: the amount of freeboard is variable as the wide range of floods, wide range of unknowns etc. What is not a variable is we own the entirety our current freeboard whatever it is. Just like we know we would own the 12 inches of freeboard if we bought or built a new house.

The illustration below depicts one instance where both houses are above the flood level, but the one without freeboard could be affected when unknown factors occur.



To be clear, there are properties that have recently been formally notified of increased flood levels. The best I understand, many are being narrowly considered for mitigation, without consideration of reasonable mitigation.

I reiterate my profound concern that the stories of the District proposing limited mitigation of the properties of our neighbors is simply wrong. I don't think anyone in this valley voted for a fee that would eventually diminish the value of other people's homes, increase flooding on their property without full mitigation, nor leave them wondering for 7 years about what the heck is going to happen to their house.

Read a few of the notices to property owners. I don't think it's decipherable what is specifically happening in most homes. There is no mention of restoration of freeboard.

I wouldn't blame property owners for being angry and I think everyone should consider how the District treats people; forcing them to hire lawyers and lose a few more years of sleep.

They may have to take part of their limited resources and sue. They might also just be so pissed they never agree to anything but full mitigation and just await eminent domain if the District does not propose something perfectly and plainly fair. Eminent Domain is a very real option for some.

I'm saddened that ultimately, the District is a huge entity being imperious in dealing with very good people that just want to live their life. Signing the CLOMR for Concurrence, before mitigation agreements are in place will allow even more years of more unfair and one-sided behavior by the District that ignores the rights to freeboard. None of us should be part of enabling that to happen.

We wouldn't treat a neighbor like that.

Ross Asselstine

San Anselmo

Cc Town of San Anselmo Council Members

Town of Ross Council Members

Ross Asselstine, August 14, 2025

My comments here are from the perspective that while I am not a resident of Ross, as a citizen of San Anselmo, we share common interest in this subject.

It is an exciting time for "flood control" in the Ross Valley and specifically the Towns of Ross and San Anselmo. We have all been dragged into a rushed process to approve a document with over 500 pages of supporting information. I've never seen anything like this in my life and I think it's just plain wrong.

The Flood District has been working on the BB2 project since 2017. It has told the State of California grant administrators since 2019 that they were "coordinating with homeowners along the creek"; that's **seven years** of effort they've spent trying to pull this project together and now they want us to rush like hell.

Then they wanted agreement from our towns in **two weeks** to meet a deadline of their own creation. (See the appended cartoon "Just Sign the Papers")

This is not a time to rush, it is not a time to cut corners, and it is not a time to believe that things will just kind of work out.

This is a time to be diligent.

Here are some of the complex issues that require further study before anyone can say they understand the effect of "Concurrence" with the submission to FEMA:

- 1. Does "Concurrence" by the Town on the MT2 FEMA form increase, decrease or have no effect of potential liabilities for the Town in the future?
- 2. The MT2 application suggests there is a single clear definition by FEMA as to when a structure is "impacted". This is not available on the FEMA website. Where did the criteria come from?
- 3. The process of the CLOMR could be interpreted as FEMA forcing an agency like the District to notify parcel owners individually and the public generally, but there is no clear definition of what mitigation of impacted structures might be and hence, FEMA has deliberately left this to local laws and forms of dispute processes to be finalized. I.e. FEMA does not attempt to override the property laws of every state and county in the US. Is it true that FEMA has no definitive description of "impacted" and hence mitigation of the impact? Does this imply that Item 2 above is not the only definition of impacted? (See the appended cartoon "The Incompetent Fortress")
- 4. It is very clear to me that FEMA's concept of "freeboard" applies to any structure, new or old. The District's interpretation of "impacted" is silent on this. I think this is a significant error because in some instances, homes see a loss of freeboard but are not proposed to have any mitigation provide to them. This appears to be a real form of protection that simply cannot be taken away. Is taking someone's freeboard without mitigation legal? (See my letter as appended of July 24th to both towns)

- 5. Considering points 2, 3 and 4 above, as well as poor behavior by District staff in regard to homeowners along the creek, it is not a leap to guess that biased District staff along with almost unlimited County legal resources, will battle unfairly with homeowners as to the extent of mitigation measures on their property. Consider that hundreds of other homeowners may receive some flood benefit from this effort at no cost and no further input or concern, while homeowners along the creek will be left to fend for themselves against a strident District. This is grossly unfair. What would be fair is that funds should be set aside for independent technical and legal advice for all homeowners along the creek with any increased floodwater on their structure. Why? Because we simply should not force these people to fund their own defense of their property. It makes zero sense to fly a flag of "reducing flooding" while forcing the few into the corner of personally funding legal bills. Can the Town force the District to set aside funds for independent legal and technical support to bring an equitable result to all?
- 6. FEMA's mapping process has been so uniform for so long it now involves grossly outdated software. It's as if we all reverted to Windows 1.0 of 1985. The errors in the proposed map are so glaring as to discredit the entire premise of changing the map at all. (See the appended cartoons "The Flood Map is simply Wrong" and "Does Your Dog Bite?")
 - a. What we can require is that the FEMA model to be changed to reflect all buildings along the floodway as that might significantly change the model. When could those results be made available?
 - b. What we can require a full study with the best software modelling available. When could those results be made available?
 - c. Can someone simply ask our Floodplain Administrators and legal advisors to answer the additional questions in "Does Your Dog Bite"?

In short, I believe now is the time to ask a lot of questions and wait for the District to give detailed responses and allow the public and town staff to again comment on those answers. They have spent tens of millions of dollars on the smallest of results, we should not think that providing answers to questions now, is too much District staff time or cost.

There are hundreds of millions of dollars of property in this flood plain. This issue is very complex and there should be no shortcuts.

A list very similar to this will be tabled for the meeting in San Anselmo later this month.

Just Sign the Papers!!



Charles XII and an Unwilling Recruit
Typogravure, Cerderstrom 1894

(left to right: Young Man, Man with Mug, and Man with Quill)

(Two men are in the catacombs of a local pub. Aretha Franklin's "Who's zoomin' who?" plays in the background. A young man enters)

MM: Young man, if you sign the papers you will go on bold adventures and protect the homeland!

MQ: Yes! You will get a sword and fine boots like mine for battle. Just take this quill and sign the "papers of conscription"

YM: (rubs head where he hit the low entryway) I have not come here today to do such business.

MM: Just sign the papers and then tell us of your other business!

YM: No thank you. It is I that is here to tell you of bold adventures and a way for you to protect the homeland.

MQ: Just sign the papers and then tell we will review your offer.

TM: I bring papers from our fine Capital, they are the "Condi Letter de Map Revisionus. They will bring you great honor, adventures and your names will go down in the history books - some of them legal! You need to sign the papers within the fortnight and it ends on Monday.

MM: I know of these papers. They are seeking to conscript us into future battles with little if any armor, no funds to feed our lawyers and are of risk to our neighbors and their lands.

MQ: Tis a fool's errand! Be not a fool young man, for we two are not fools.

TM: Just sign the papers. It is your time to act swiftly! Be bold! Seize the day! Just sign the papers and tell me of you fine advisors. Think of the bronze statue of you in the town square! Sign the papers and create your **LEGACY**!

MM: We are going to take our time to review these conscription papers with our advisors and leadership: our river engineers, barristers, planners, the finance and infrastructure commission, the citizenry at a few Town Council meetings, and oh yeah, the Parks and Recreation Department.

MQ: Fine sir, but it is US that are the evasive, pushy, fanciful Agents of Conscription! We cannot be conscripted in some local bar for a life of future misery and financial tragedy.

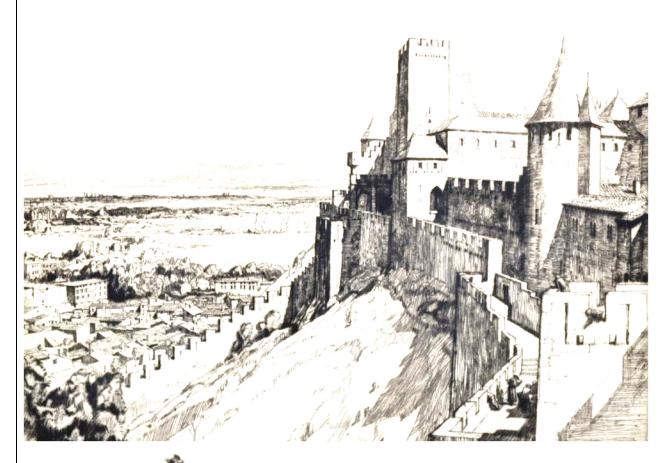
TM: What do I tell the persons at the Capital?

MM and MQ: (in unison) Tell them you have a half-baked plan, with no valid EIR, great risk built in, it will likely drag us all into future battles with little if any armor, no funds to feed our lawyers and at great risk to our neighbors and their lands.

And...don't come back without an acceptable indemnity clause and the funds to back it up!

(The young man exists and hits his head again on the low doorway)

The Incompetent Fortress



*They know there are no fortifications on the other side!"

The New Model is Simply Wrong





Tunstead Ave in 1982 and Today

The image on the left shows the flood in 1982 racing down San ANslemo Avenue at the Wells Fargo building on the far left. The image on the right is an image from all but the same location.

Consider this: racing water like this is called a "floodway", the current map shows this street as a "floodway", the proposed new map shows a 2" reduction in depth of 3-4 feet of water but....it is no longer a "floodway"! This makes no sense in the real world. It's impossible.

This is the new FEMA map world with the red boundary of the "floodway", and <u>all the rushing water</u> taking a hard left turn now before Wells Fargo. The black arrow is from where the images were taken from near the Cheda Building's southern face. (yes it's an odd map and not mine.)

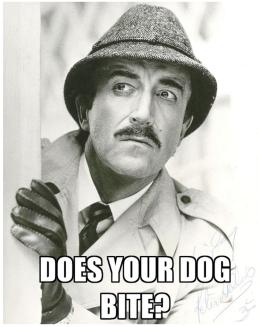


The proposed FEMA map quicte simply cannot be correct. This begs the question of the quality of map that may become the new standard for decades to come.

It has to be re-checked as it's so obviously wrong.

Ignoring the Unknowns only Avoids Understanding the Issues at the Right Time

Does Your Dog Bite?



Peter Sellers The Pink Panther 1976

The hilarious issue of asking a certain question and not getting the information you truly need, is all but defined by the scene in the Pink Panther. A good question but not the right one to protect oneself. "No" was the answer and the person is promptly bitten by the dog and the response is: "It is not my dog"

Here is what we have now in terms of "Does your dog bite?" in San Anselmo and the Town of Ross:

Question 1: "Does the proposed map conform to FEMA flood modeling?"

Answer 1: "We will review the submission based on that specific question." (answers forthcoming)

There are other important questions that sould be asked of professionals.

Question 2: "Unusual irregularities have been raised by the public about the new map that is purported to be compliant. A few additional questions:

- a) Can the FEMA model include buildings along the floodway boundaries so we can see see if we get a better more accuate map?
- b) Can the FEMA model topography be checked, as the water flows up-hill in some locations and this would get a better more accuate map?
- c) Are you at all concerned that the FEMA model is both required, but also not state of the art and might include what some might call "the spinning of truth"?
- d) We understand that there are numerous other great new types of modeling software programs out there. We have about \$100,000,000 of property along the creek edge and at least another \$500,000,000 in the floodplain that is could be changed. If you were to pick the best software out there and run that model, could you bring us those results such that we could all compare the FEMA model and that model?
- e) As a professional with the public interest in mind, what other actions would be diligent right now?"

Answer 2: Great question. An awesome question actually. We will get back to you!

Ignoring the Unknowns only Avoids Understanding the Issues at the Right Time