

Flood Management & Drainage Task Force

🏠 **Location:** webcast
📅 **Date:** May 13, 2020
🕒 **Time:** 1pm – 3:00pm

Meeting #4 Summary

Attendees: Andrew Poster, Robin Lee, Emily Straley, Tony Boyd, Richard Rider, Roger Leventhal, Hugh Kuhn, Matt Cramer, Gary Lion, John McCauley, Tricia Ossa, Stephanie Moulton-Peters, Apryl Uncapher, Linn Walsh

1) HOUSEKEEPING

- a) The Task Force elected John McCauley as Chair.

2) HISTORICAL MAP OF MILL VALLEY

- a) These maps were presented to show the historical location of the Bay and marshes. Some of the areas that the Task Force is looking to protect from floods historically were located in the Bay or a salt marsh. These maps should be presented in community meetings to set the stage for how difficult it is to engineer a project to protect some of these areas.

3) OVERALL MEETING SUMMARY

- a) Stetson studied the Creek from 2008 – 2017 and developed solutions that were too expensive for the City to pursue. In 2017, the City hired Schaaf & Wheeler hoping for a fresh set of eyes and to attempt to identify a simple solution that would be environmentally sound and more feasible in terms of costs. Schaaf & Wheeler has come to the same conclusions as Stetson; that the flooding issues are complex, caused by multiple sources, and there is no silver bullet that can mitigate all the issues within a reasonable budget. In addition, the Creek system itself is so undersized that most solutions require the City to buy easements and residents to give up all or portions of their backyards, which isn't something the Task Force expressed interest in pursuing.
- b) Instead, the Task Force recommends the Master Plan include a "surgical approach" which will start at the end of the Creek with resolving small issues such as not functioning flap gates, dealing with high tides, and possibly dredging. Slowly, the work can proceed upstream. Issues higher up in the creek and watershed cannot be resolved until downstream capacity limitations are resolved as sending more water downstream can remove flooding in one place and induce flooding elsewhere.
- c) Task Force voted to separate the flood management and storm drain master plan (SDMP) into two separate reports in an effort to expedite budgeting and implementation of drainage repairs. However, upon receiving further input and ensuing

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discussions with the Chair and staff, it was decided that it is in the City's best interest to keep the two topics in a single Master Plan and Flood Mitigation Report as initially envisioned, in order to present both types of projects to Flood Zone 3 for consideration of comprehensive funding of addressing Mill Valley's flooding issues.

- d) An outline of the proposed Community meeting presentation and Master Plan Report will be shared with Task Force members for soliciting their input in the mid to late June timeframe.

4) DREDGING

- a) Justin Semion from WRA presented a summary of the process, timeline (Work only allowed between Sept 1 through Nov 30 and it takes about 2.5 to 3 years to receive approval to proceed. , environmental considerations, and costs to dredging (expected to be \$3 Million for the first year, not including transporting and placement of the spoils/fill, which is often the most expensive part. The project would need to be repeated approx. every 5 – 10 years).
- b) The increase in capacity is minimal as compared to the larger bypass systems presented. However, there could be some smaller benefits such as improved flap gate performance with dredging. Perhaps dredging is more of a maintenance procedure that is included into the SDMP.

5) CREEK SYSTEM BYPASSES

- a) Two bypass solutions have been presented that address the 10-year storm event
 - i) Warner Creek bypass 4.5-ft culvert down Blithedale - \$10M – \$12.5M
 - ii) ACMdP – 20' x 4.5' culvert down Miller - \$36M - \$45M
- b) It was identified that if Warner Creek could be diverted into ACMdP near Fern Street, the Blithedale bypass (the culvert removing overflows from Warner Creek) would not be needed, but the Miller bypass would still be required. Additionally, the Miller Bypass must be completed first, because the ACMdP does not have capacity at Willow Street to accept more flows from Warner Creek. No costs were presented for this alternative as it an easement between two parcels, or possibly acquiring both parcels.

6) RAISING HOUSES

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- a) While this flood mitigation strategy appeared unrealistic during the first meetings, based on the large costs for the bypasses which solve only the 10-year storm event, more research has been put into raising homes.
 - b) Schaaf & Wheeler presented a phased approach to raising the homes that were damaged during the 05/06 storm event, which has been deemed similar in nature to the 100-year storm event.
 - c) Homes would need to be raised about 2-3 feet to meet FEMA standards, and then some sort of Sea Level Rise (SLR) factor should be included as well.
 - d) The total for all three phases of raising homes was presented to show a comparison to the large bypass systems. All homes could be raised for less money than the Miller bypass alone.
 - e) Raising homes would address the 100-year storm event and rising tides. The large bypass culverts would only solve the 10-year storm event and does not protect homes from rising tides.
 - f) Could be significant savings to homeowners in the floodplain as they would no longer be required to have flood insurance policies, savings on the order of \$2-3k annually.
 - g) While raising homes would not be something the City would pay for, it is something that could be implemented by an Assessment District and a program that the City could support in ways such as providing no-cost permits to complete the work and staff assistance locating contractors and suggested SLR height to include into design.
 - h) It should be noted that some of the homes in the Sycamore neighborhood have already been raised above the floodplain. Any significant improvement requires homes in the floodplain to elevate one foot above the mapped 100-year water surface elevation. But FEMA does not require any SLR height additions.
 - i) Raising homes may introduce other concerns or opportunities with the City's Planning process, in terms of maximum heights, volumes, etc. issues that would need to be considered and addressed.
- 7) **CITY BACKLOG OF STORM DRAIN WORK (to be included into SDMP)**
- a) City currently has \$0 set aside for storm drain maintenance projects. This is compared to annual funding of \$1.8 for sewer maintenance projects.

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- b) As typical with most agencies, residents pay a sewer use fee, but do not pay separate fees for storm drains. Storm drains are not considered a utility and are difficult to secure funding for due to Prop 218 requirements.
- c) Novato and Moraga recently voted down stormwater fee measures, while the cities of Berkeley and Alameda passed stormwater fee measures.
- d) Mill Valley has the following backlog of work that could become the basis for the SDMP:
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| i) Detailed Mapping of infrastructure | \$150k |
| ii) Upsizing undersized pipes | \$7.5M |
| iii) Repair/Replace/Rehab | \$350k |
| iv) Replace CMP | \$8.5M |
| v) Flap Gates | \$75k |
| vi) Ongoing annual programs TBD | |
| (1) Nuisance Drainage Issues | |
| (2) Raising/Adding curbs | |
| (3) Ongoing inspection and maintenance | |
- 8) **FURTHER RESEARCH AND ANALYSIS**
- a) None Identified
- 9) **NEXT STEPS**
- a) Outline Community Meeting presentation for Task Force members to review and provide input
- b) Draft Master Plan outline for Task Force members to review