

FLOOD ZONE 5 ADVISORY BOARD MEETING

APRIL 18, 2019

STAFF REPORT

5:30 p.m. - 7:30 p.m.

5:30 p.m.

6:30 p.m. - 7:30 p.m.

Meet at Easkoot Creek Behind Parkside

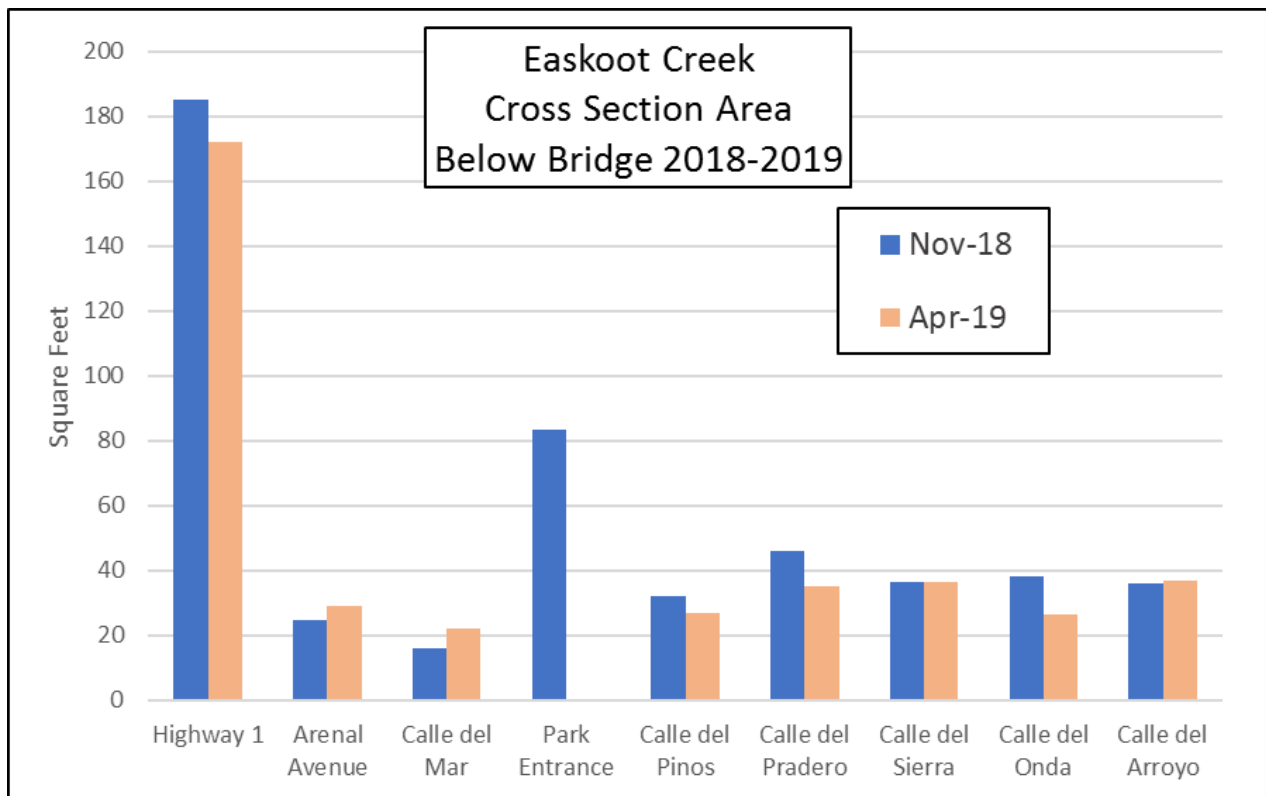
Regular meeting format at Community Center

Item 1. Walking Tour of Parkside Sediment Trap and Calle Bridge Crossings 5:30- 6:30 pm

Meet at the the sediment trap behind the Parkside Café. We will walk downstream as far as Calle del Arroyo and back to the Community Center.

The sediment trap at the Parkside was constructed 5 years ago to provide an accessible and seasonally dry location to conduct sediment removal because of constraints along the Calles downstream. Since construction of the basin, sediment removal has occurred at least annually at the basin and once at Pinos and Pradero only. The intent of the tour is to consider the effectiveness of the existing configuration and future maintenance considerations.

The following figure shows the area under the bridges before and after this winter.



For more information see the staff report from February 21, 2019:

<http://www.marinwatersheds.org/about-us/events-meetings/flood-control-zone-5-advisory-board-meeting-0>

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Item 2. Approval of Meeting Minutes: February 21, 2019

Recommended Action: Approve minutes.

Item 3. Open Time for Items not on the Agenda

Comments will be heard for items not on the agenda (limited to 3 minutes per speaker).

Item 4. Annual Creek Maintenance and Sediment Management Planning

AB can discuss with staff observations from the walking tour and recommendations for the creek vegetation and sediment maintenance work plan this summer.

Sediment was removed from Calle del Pinos and Pradero in 2017 with holes dug at the upstream and downstream sides of the bridge. Traces if this excavation are still evident at Calle del Pinos, however the benefits are shortlived and the cost is high because it does not go dry and special measures must be taken to protect fish and aquatic habitat. The grant partnership discussed in agenda item 7c might be an opportunity to update channel elevation and sediment aggradation data and inform a future sediment removal plan with longer lasting benefits.

Staff recommends the 2019 summertime creek maintenance work plan include sediment removal at the Parkside sediment basin with heavy machinery and use of the Conservation Corps North Bay for manual vegetation clearing and debris removal at other sites including and focused on the Calle bridge crossings.

Item 5. GGNRA Beach Park Long-Range Planning Discussion

The concept for creation of a flood-flow overflow to the ocean for Easkoot Creek has been discussed as a mitigation for Zone 5 flood risk for decades. The Stinson Beach Watershed Program produced a modeling study that looked at this concept and several alternatives:

<http://www.marinwatersheds.org/resources/publications-reports/stinson-beach-watershed-program-flood-study-and-alternatives>

Since the study development, Easkoot creek has twice flooded the GGNRA beach park and overflowed to the ocean. Zone 5 is receiving an update from GGNRA to discuss how this configuration could be re-designed to relieve flood risk and reducing future property damage.

National Park Service staff plans to attend and provide an update on this effort and discussion of associated challenges and opportunities to consider in a long-range planning effort.

Item 6. Zone Engineer's Report

A. Winter Storm Report and Gauges

Marin's existing network of rain, weather, and creek gauges (see attached map) was recently upgraded and doubled in sized using CA Department of Water Resources (DWR) Flood Emergency Response Project grant funds in a project led by the Marin County Flood Control & Water Conservation District in partnership with other North Bay agencies and the National Weather Service (NWS). The network improves real-time interagency public safety communications, situational awareness and disaster intelligence. The system upgrades resulted in state-of-the art storm and flood gaging

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systems to better inform and prepare first responding agencies for flood emergency response and preparedness. The North Bay's varying microclimates, lack of radar coverage and flash-flood prone creeks necessitated expansion of the existing system. The gauging systems in the three north bay counties improve their ability to plan and prepare for flood events and debris flows and enhance their real-time awareness and communication of storm and flooding conditions both to their first responder partners, such as the Marin County Office of Emergency Services, as well as to DWR, NWS, USGS, CalOES and others involved in flooding and related impacts. At the local level, the County Administrator's Office and Emergency Operations Center rely on data provided by these gauges in order to make emergency response decisions. Additionally, the National Weather Service depends on these gauges for accurate forecasting and real-time notifications such as issuance of flood warnings. Gauge data is available to all people on marin.onerain.com and is frequently used by members of the public, students, and professionals throughout and outside of Marin.

The County and District are contemplating further expansion of the gauging system within Marin. For the purpose of situation awareness District staff have long been utilizing output from the Stinson Beach County Water District weather gauge at http://stinson-beach-cwd.dst.ca.us/weather/Current_Vantage_Pro.htm, and consider collecting hydrologic and hydraulic data in the Stinson Beach area to have benefits not only to Zone 5 but also regionally for the reasons outlined above.

Staff will report on storm updates since the February AB meeting and invite the AB to brainstorm ideas and prioritize potential additional or upgraded precipitation, weather, and/or stream gauging in Marin.

Item 7. Update on County (Non-District) Programs

A. Coastal Sea Level Rise Adaptation Proposals

Marin County Community Development Agency's (CDA) long-term planning division released a request for proposals from interdisciplinary consultant teams with expertise in engineering, coastal sediment, and biology, to develop and evaluate the feasibility of conceptual alternatives for nature-based sea level rise adaptation measures at Stinson and Upton Beaches, and possibly Seadrift. Example adaptation measures that may be included in the analysis are dune restoration and planting, cobble berm placement, and long-term backshore adaptations including armoring, raising buildings, or retreating upward.

Goals of the this study include: 1) raising the understanding of the feasibility of living shoreline adaptation strategies at Stinson Beach to a level comparable with traditional infrastructure; 2) determining what solutions will the community and regulatory agencies agree on that are feasible to protect beach habitats, recreation, and existing land uses for as long as possible; and 3) filling knowledge gaps and developing a feasible roadmap and tools to further adaptation at Stinson Beach. During the process of developing and evaluating alternatives CDA would hold several public workshops and stakeholder meetings to seek input.

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CDA received two proposals for the study and Zone 5 staff participated in the proposal evaluation committee and interviews of the two consultant teams. Before interviews staff inquired about the potential for this evaluation to interface with certain Zone 5 objectives. Both teams that were interviewed considered Easkoot Creek to be a worthwhile sediment/cobble source to be evaluated for beneficial reuse in potential adaptation measures on the beach. CDA will be making a consultant selection in the next few weeks considering the evaluation committee's feedback.

B. State of Bolinas Lagoon Event – May 2

The Bolinas Lagoon Advisory Council is an interagency group that advises the County on the management and ecological restoration of the Bolinas Lagoon. On May 2 at 6:30 pm the Council is presenting the State of Bolinas Lagoon event at Stinson Beach Community Center, 32 Belvedere Avenue in Stinson Beach. If Zone 5 AB members are interested in attending this would seem to be a good opportunity to build partnerships.

C. Potential Application for Wildlife Corridor and Fish Passage Program Grant

On April 4 the Wildlife Conservation Board announced a solicitation for a Wildlife Corridor and Fish Passage grant under Proposition 68. A Pre-application is due April 26 and, if invited, a Full Application is due June 14. Priorities include construction of wildlife overcrossings and undercrossings, restoration of natural habitats that provide a visual screen in wildlife corridors, and removal of instream impediments to fish passage. Marin County Parks & Open Space is considering submitting a Pre-application for a sediment source and transport study for some tributaries to Bolinas Lagoon. Some of the goals would be to better understand potential areas where sediment could be removed and used for nature based adaptation projects and/or areas that may need to be restored or stabilized. If Zone 5 partners with Parks to include Easkoot Creek in this study it could help meet the Zone's maintenance permit requirements with Regional Water Quality Control Board, as well as potentially reduce future sediment disposal costs by identifying a beneficial reuse for it nearby. Preliminary estimates are that adding a tributary to the study would cost Parks an additional \$8,000. Staff recommend offering towards this effort up to a \$4,000 match in in-kind staff costs and/or cash contribution depending on Parks' needs.

Recommended Action: Recommend that the District Board of Supervisors increase the Zone 5 budget by \$4,000 next fiscal year

Item 8. Schedule Next Meeting

The AB may consider setting the next meeting date.