

**City of Berkeley
Watershed Subcommittee
of the
Public Works Commission**

MEETING AGENDA

Subject: Watershed Management Plan

Date: April 19, 2018

Time: 5:00 p.m. – 6:00 p.m.

Location: Au Coquelet Café & Restaurant, 2000 University Ave, Berkeley, CA 94704

1. Call to Order and Roll Call
2. Comments from the Public (3 minutes each speaker)
3. Discuss/Action:
 - a. Review Watershed Management Plan Staff Update Request
 - b. Discussion on Aquatic Park tide tubes and Ashby interchange outlet
 - c. Discussion on King School T1 GI Project
4. Adjournment

An agenda packet is available for public review at the Engineering Division front desk.

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Watershed Subcommittee

Staff Update Request

Sub-Committee Members Attending: Nicholas Dominguez, Margo Schueler

The Watershed Subcommittee is Requesting Staff Response to the following questions that arose after review of the current Watershed Master Plan at the February 19, 2018 subcommittee meeting.

Chapter 1: Recommendations for Stakeholder Participation

- 1.1 Inter-Departmental Coordination: Conduct on-going inter-departmental coordination of priorities and recommendations to pursue opportunities for joint pilot programs and projects.

What inter departmental conversations have occurred and what has come of them?

- 1.2 WMP Public Meetings & Presentations: Conduct public meetings and make presentations over the next year to various City Commissions and Council.

What presentations have been made to Council or the public?

- 1.3 WMP Website: Use electronic media (such as the Watershed Resources webpage on the City's website) and other means to keep public and any interested parties informed of upcoming meetings, volunteer opportunities, and the latest version of the WMP.

Who is in charge of updating the watershed resources web page and how often is it updated?

- 1.4 Potter and Codornices Watersheds – Public Meetings: Conduct watershed-specific public meetings in the Potter and the Codornices Watersheds to discuss and refine watershed-specific goals and priorities.

What Potter and Watershed meetings have occurred and what has come of them?

- 1.5 Partnership Opportunities: Identify partnerships opportunities with institutional/agency stakeholder groups (i.e. UCB, and BUSD) to develop mutually beneficial projects and agreements.

What partnerships have been pursued?

- 1.6 Other Watersheds –Goals/Modeling/Priorities: As funding becomes available for the hydraulic modeling of each remaining watershed and after completion of the modeling for each, conduct watershed-specific public meetings within the modeled watershed to discuss and refine watershed-specific goals and priorities.

None, we understand that no other modeling has been completed.

Chapter 2: Recommendations for Watershed Conditions

- 2.1 Global Climate Change Monitoring: Monitor and review scientific reports and information on Global Climate Change, and amend WMP as appropriate.

What scientific references have been used and how has it changed the WMP?

Chapter 3: Recommendations for LID/Green Infrastructure

- 3.1 San Pablo Stormwater Spine Project: participate in grant-funded multi-City demonstration project installing LID retrofits on San Pablo Avenue sites from Oakland to Richmond. The City is a partner in this grant-funded effort spearheaded by the San Francisco Estuary Partnership to identify, design, install GI retrofits along San Pablo Ave with each site treating one acre of impervious surface run-off.

It is our understanding that we did not participate as recommended with the exception of a small McDonalds improvement. Please confirm and provide a brief explanation for why not.

- 3.2 LID/GI Coordination Opportunities with other Public Works Programs: seek opportunities for incorporating LID/GI measures as a standard element in the design and implementation of various Public Works projects and programs. The City undertakes numerous capital improvement projects annually to enhance transportation, public safety, community aesthetics, environmental processes, and internal and external services. The City can and should be a model for others to follow in designing and implementing LID/GI BMPs for future projects. Potential PW programs to coordinate with include:

- 3.2.1 Streets & Sidewalks Group: The reconstruction of streets and sidewalks can incorporate Landscape and Street & Sidewalk Retrofit BMPs

Did we add LID/GI to design guidelines as recommended?

- 3.2.2 Sanitary Sewer Group: Disconnecting roof drain downspouts from sanitary sewers is one preferred method of reducing infiltration and inflow(I/I) to the sanitary sewers, which can become overwhelmed during the wet season rains. The Downspout Disconnection Program can promote the use of LID measures (such as rain barrels, cisterns or landscape-based BMPs) for properties subject to disconnection. Connections are currently being investigated through smoke-testing.

Please provide a status report with how many connections have been corrected, the status of LID measures and the methods of tracking these measures.

- 3.2.3 Buildings and Facilities Group: Integrate LID measures into building and facility renovations and new construction. Examples of City projects that have LID measures include the new Animal Shelter at Aquatic park (green roof) and the Fire Station Warehouse on Folger (rainwater harvesting cistern).

Was LID/GI included in facilities design guidelines city wide or just on the example projects?

- 3.3 Technical Guidance on LID BMPs: Review and edit LID technical guidance information distributed at Permit Service Center and public events. Because of the cumulative nature of the benefits of LID throughout a watershed, it is important to encourage voluntary use of LID BMP installations within the private sector. Appropriate and consistent LID BMP guidance information should be available to the general public, project proponents (including developers, landscape architects, architects, and contractors), and City staff responsible for Plan Check and Design Review.

Were any changes made to the publicly available technical guidance on LID BMPs after this plan was issued and how is the guidance distributed? Is it possible to get a geographic report on permeability citywide? What staff member would be responsible for these issues?

- 3.4 Investigate the Potential and Use of — In-Lieu Pilot Program for LID: the City could develop a pilot program to allow for the (partial or full) financing of adjacent public right-of-way GI retrofits and long-term maintenance as an — in-lieu condition of approval. While it is always preferable to treat and manage stormwater on-site, in ultra-urban settings like Downtown Berkeley it may be challenging to incorporate on-site LID measures in design plans due to limited space or other constraints.

Please confirm that this initiative was included at the start of measure M but didn't come to fruition.

Chapter 4: Recommendations for Water Quality Protection Activities

- 4.1 ACCWP Planning and Regulatory Compliance activities, including: Management Committee and subcommittees, Watershed Assessment Program, and Monitoring and Special Studies—continue at existing level

Please confirm we are continuing to participate in these compliance activities.

- 4.2 New Development and Redevelopment Controls—continue at existing level

No response necessary. Development controls are still in place.

- 4.3 Industrial/Commercial Discharge Inspections & Controls—continue at existing level

Please confirm discharge inspections are still occurring.

- 4.4 Illicit Discharge Control Activities—continue at existing level

Include in response to 4.3.

- 4.4 Private Property LID Promotion - Examine Policy Option to Reduce Hydromodification and C.3 Thresholds. Explore the potential impacts (to staff resources and property owners) of reducing existing threshold requirements that trigger the use of LID and other stormwater management techniques to avoid hydromodification and increased runoff.

Did we reduce the thresholds as recommended? Please state how ADU additions affect this threshold.

- 4.5 Trash Assessment Protocols—develop Trash Assessment Protocol guidance for volunteers. Trash collection activities are conducted by volunteer groups throughout the year. Sometimes these events take place in the designated Hot Spots, without supervision by City staff. With the proper protocols available, non-supervised volunteer groups can collect trash data that the City can use to monitor rates of accumulation, likely sources, and volumes removed.

It is our understanding that trash capture servicing moved from volunteers to city staff and is not being enforced, is that correct? Has the City looked into the Adopt a Drain volunteer program in San Francisco?

Chapter 5: Recommendations for Creeks

5.1 Floodplain Administration Duties: continue at current level of service.

How are the Floodplain administration duties being updated for climate change?

5.2 Watercourse Flooding Investigations: continue at current level of service.

Please confirm flooding investigations are occurring. How are they reported to the public/commission?

5.3 Preservation and Restoration of Natural Watercourses: continue at current level of service.

No response necessary. It is our understanding preservation efforts still underway after Cordornices restoration

5.4 Creek Culvert Condition Assessment Program –Perform condition assessment investigations on 20% of City owned creek culverts annually. Thus the entire City would be covered in 5 years. The process would begin again after the 5 years, providing opportunity to prioritize replacement and rehabilitation opportunities based on need. This will also enable the City to track the rate of deterioration. Characteristics such as pipe shape, invert elevations, length, and construction materials obtained from the condition assessments will be input into the City’sGIS database.

It is our understanding that the Creek Culvert Condition Assessment Program is not occurring as recommended. Is this correct and why?

5.5 Creek Culvert Rehabilitation Program – Based on results of hydraulic modeling and CCTV investigations, the City would develop a Creek Culvert Rehabilitation Plan (CCRP). The CCRP would identify and prioritize any needed repairs.

Is there a CCTV investigation process for storm and sewer rehabilitation? If so, what reports are made?

5.6 Creek Restoration—Identify, seek partnerships, and grant funding for creek restoration and stewardship projects. Identify capital improvement funds that can be available as — matching funds for grant programs.

Has the City pursued any grants after Cordornices restoration?

5.7 Volunteer GPS Creek Assessment Program—Pilot open watercourse assessment program on Codornices Creek, using trained volunteers to collect physical conditions and habitat data with Global Positional System (GPS) technology with permission of private property owners. This data can be used to further refine future hydraulic modeling efforts and identify common concerns across property lines.

Is the Volunteer (GPS based) Creek assessment program occurring? It is our understanding that groups such as Trekkers, Friends of Five Creeks, Partners for Parks are doing this without city support.

5.8 Creek Guidance Materials—Provide creekside property owners with best management guidance for stewardship.

What materials are being provided to these property owners?

Chapter 6: Recommendations for Storm Drain Facilities

6.1 CIP Program

- 6.1.a. Rehabilitation Program: Current Rehab projects come from the list of priority projects that have recurring localized flooding issues or present a public nuisance. Projects are implemented based on funding available. Future additional rehab projects would be based on results of hydraulic modeling and CCTV investigations.

How are these flooding issues tracked and how are rehab projects monitored?

- 6.1.b. CI Program: Recommended CI plans are provided for the Potter and the Codornices Watersheds (Chapter 8), which have already been hydraulically modeled. CI planning for the remaining watersheds will be done after analyzing the results of future hydraulic modeling of each watershed.

Is any hydraulic modeling influencing CIP Program rather than acting as responsive measure to flooding? Has any modeling occurred after the Codornices restoration work and what has been the impact of the restoration?

- 6.2 Hydraulic Modeling: As funding becomes available, develop hydraulic models for all watersheds in Berkeley to determine extent of capacity issues, identify constrictions, and evaluate potential capacity gains from pipe upsizing, realignments & modifications, and green infrastructure measures.

Is 218 going to pay for hydraulic modeling in the future? How are impacts of GI/LID improvements being monitored and how is that informing future projects?

- 6.2.a. The Potter Watershed and the Codornices Watershed have already been hydraulically modeled. Uplands draining into Aquatic Park south of Channing are included in the Potter Watershed analysis.

No response necessary.

- 6.2.b. Remaining Watersheds to be modeled in order of priority:

1. Strawberry
2. Schoolhouse
3. Gilman
4. Marin
5. Cerrito
6. Wildcat
7. Temescal

Please explain the prioritization?

- 6.3 CCTV Inspection Program: Perform physical conditions assessment investigations on 20% of the City's storm drain pipe infrastructure annually. Thus the entire City would be covered in 5 years.

The process would begin again after the 5 years, providing opportunity to prioritize replacement and rehabilitation opportunities based on need. This program will also enable the City to track the rate of deterioration. Characteristics such as pipe shape, invert elevations, length, and construction materials obtained from the condition assessments will be input into the GIS database. The first watersheds for CCTV Inspection should be the Potter and Codornices Watersheds. Storm drain pipes that are not included in the CIP recommendations (Chapter 8) or are less than 18 in diameter in should be investigated.

Are CCTV inspections being done every 5 years? How does this influence CIP? Please provide the reports if possible.

Chapter 7: Recommendations for Maintenance

7.1 Catch Basin and Inlet/Outlet Servicing: continue at current level of service.

Is there a basin inlet servicing report?

7.2 Minor Storm Drain Facility, Curb & Gutter & Street Repairs: continue at current level of service.

No response necessary.

7.3 Wet Weather Maintenance Program: continue at current level of service.

What is the status of the Wet Weather maintenance Program? Are funding levels jeopardizing this program?

7.4 Miscellaneous PW Storm Maintenance Activities: continue at current level of service.

No response Necessary

7.5 Street Sweeping Program: continue at current level of service.

This will be addressed by the PWC Street Sweeping Subcommittee.

7.5.a Residential Area Street Sweeping

7.5.b Commercial Area Street Sweeping

7.5.c Industrial Area Street Sweeping

7.6 PRW Maintenance Activities: continue at current level of service.

Is there a report on PRW Maintenance Activites?

7.7 Install and Maintain New Full Trash Capture Devices: install and maintain.

What new capture devices have been installed?

7.8 Consider realignment of Storm Maintenance Districts to match watershed boundaries

Were the boundaries redone? If not, why?

7.9 Add Second Jet Vactor Crew for year-round catch basin, inlet/outlet servicing. The City is in the process of purchasing another jet-vactor truck. The existing hand-rodding crew can be replaced

with a second jet vector truck crew to increase annual production. With another jet-vector truck in service, the crews can add pipeline cleaning as a routine element of preventative maintenance. Cleaning the lines would also facilitate recommended condition assessment inspections.

How many Jet Vector Crews do we use? Has pipeline cleaning been added to work duties?

- 7.10 Sand Bags Program: Purchase either (1) seven small flat-bed trailers, or (2) one transportable forklift to facilitate the transport, drop-off, staging, and pick-up of sand bags. The current practice is hand loading and unloading of bags from a truck. This becomes time consuming when factoring in the replenishment of supplies and the pick-up of unused bags at the end of the winter. Additionally, putting the City of Berkeley logo on all bags would discourage the pick-up and use of free bags by private contractors, looking to save money on materials.

Have any change to sand bag program since adoption of this plan? Was the Berkeley logo added to sandbags?

- 7.11 Concentrated Leaf & Debris Clearing (All Storm Day): Reestablish the extra weekend street sweeping assignments during the heavy leaf fall season, and refocus All Storm Day as a volunteer-oriented program supplemented by City forces. The All Storm Day event does not collect the tonnage of leaf fall and debris that was collected by the discontinued special seasonal street sweeping routes.

Weekend extra street sweeping being done? What is the status of the All Storm Day?

- 7.12 Street Sweeping Program: Coordinate with PW-Maintenance to evaluate and explore options for improving efficiencies. Options that could be considered are: Increase the residential street sweeping program to weekly instead of monthly. Augment the monthly residential mechanical street sweeping with eight laborers; four laborers to work with each of two street sweepers simultaneously to hand sweep the leaves from the gutter to the travel lane to be picked up by the mechanical sweeper. Consider the possibility of towing cars that are left parked on street during sweeping times; or purchase more maneuverable equipment that could be operated from the sidewalk to pick up leaves and debris between and under parked cars.

What decision has been made on whether to tow cars or not?

- 7.13 Develop Training Program and Maintenance Plan for Green Infrastructure Measures

Has a Training program been developed?

[Chapter 8: CIP Plans Based on Hydraulic Modeling](#)

Has any progress been made on additional hydraulic modeling besides Potter and Cordornices basins?

[Other Public Comments & Questions:](#)

A slideshow is needed to present watershed management to the public.

Should we allow development along boulevard drive in Aquatic Park?

Should Potter and Cordornices basins be modeled again to incorporate climate change and restorations?

Currently all 218 money goes to dedicated Storm Water System Fund (Grey infrastructure). It should be rededicated to a function that Green Infrastructure can be funded with. How might 218 funds be used?