

EXISTING COB PLANS & POLICIES RELATIVE TO WMP

It is understood that the WMP will need to be compatible and consistent with existing City-approved plans and policies. City staff has reviewed the BMC as well as several high-profile completed planning efforts to assess where and how the WMP may support or conflict. As conflicts arise, staff will recommend modifications to either the WMP or existing policy as needed, depending on the importance of the issue in question. This section provides a brief overview of certain specific plans, policies, and programs that may directly affect the recommendations and implementation of the WMP. This list is not all-inclusive as it is possible that other programs and policies may also influence or be influenced by the WMP. As a living document, the WMP will be periodically updated to include future City, County, Regional, or Federal policies, programs, and plans that may impact local Watershed Management planning.

Berkeley Municipal Code (BMC) 7.76—Clean Stormwater Fund imposes fees on real property owners solely for the purpose of raising income and revenue necessary to improve the quality of stormwater discharged from the City-owned stormwater conveyance infrastructure. The annual fee for owners of parcels in all land use categories is calculated based on the formula: $[(\text{parcel size} \times \text{runoff factor}) / (\text{RU})] \times [\text{rate per RU}]$. Runoff factors for various Land Use Categories are provided in the BMC, while the standard runoff rate (RU) is established by City Council resolution.

Clean Stormwater Fund revenues can only be expended for clean stormwater activities and no other purpose. By definition of the ordinance, Clean stormwater activities include programs required under the Alameda Countywide Clean Water Program and the NPDES Permit; operation and maintenance of the City's stormwater drainage infrastructure; capital improvements to repair, rehabilitate, or replace components of the stormwater drainage infrastructure; any other activities related to the foregoing; and the administration of the ordinance.

The fee is capped at existing levels by Proposition 218, which allows fee increases only by approval of 2/3 vote of Berkeley citizens.

BMC 17.06—Drainage into Sewer System establishes that all or any devices, inventions or piping systems which convey directly or indirectly stormwater, surface water, roof runoff, intercepted groundwater or subsurface drainage into sanitary sewers, are prohibited except by special temporary permit obtained from the Director of Public Works. It is the duty of the property owner to abate prohibited connections within 180 days of receiving a Notice of Violation from the City.

BMC 17.08—Preservation and Restoration of Natural Water Courses regulates development near open creeks, building over or near culverted creeks, and prohibits the obstruction or interference of watercourse flow. Permits from the City Engineer are required for the construction or placement of any wall, culvert, drain, bulkhead, riprap or other structure in any natural watercourse or creek in the City.

BMC 17.12—Flood Zone Development encapsulates the City's floodplain management policy. This ordinance provides the City with the tools needed to protect human health, minimize rescue and relief efforts in the event of a significant storm, minimize prolonged business interruptions, enable owners and residents to participate in the National Flood Insurance Program, ensure potential buyers are notified of the potential threat, and ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

BMC 17.20—Discharge of Non-Stormwater into the City's Storm Drain System--Reduction of Stormwater Pollution,

Sanitary Sewer Management Plan (SSMP), 2009 describes the activities undertaken by the City to properly manage, operate, and maintain all portions of the City's wastewater collection system. Among other detailed information needed to comply with state regulations, the SSMP provides overviews of: 1) the City's organizational structure relative to the sanitary sewers, 2) the sanitary sewer operations and maintenance program, 3) design and performance provisions, and 4) overflow emergency response plans.

Because both primarily operate under gravity control and are located within the City right-of-way, the sanitary sewer mainlines are often closely aligned with storm drain pipelines. Blockages, pipe failures, remnant connections, and heavy wet weather can cause breakout flows from either sanitary sewers or storm drain pipelines. Sanitary sewer overflows (SSO) can impact local water quality if sewer discharges access stormdrain pipelines or waterways prior to containment. Conversely, inflows and infiltration from wet weather flows or leaking stormdrain pipes can overwhelm sanitary sewer systems and treatment facilities—also potentially impacting water quality in the San Francisco Bay.

Bay-Friendly Landscaping Policy for City Projects, 2009 Established by Resolution Number 64,507-N.S., this policy requires new development, redevelopment, or renovation projects initiated by the City (after August 1, 2009) with greater than 10,000 sq. ft of landscaping to achieve the minimum Bay-Friendly Landscape Scorecard points into their design and implementation. Other City projects, not meeting the 10,000 sq. ft. threshold, are required to achieve the most Bay-Friendly Scorecard points as practicable. These Bay-Friendly Scorecards and associated Guidelines, developed by

StopWater.Org (nee Alameda County Waste Management Authority), promote green landscaping as a whole-systems approach designed to conserve natural resources, reduce waste, minimize water and pesticide use, and reduce stormwater run-off. Further, green landscaping also creates wildlife habitat, protects local ecosystems, promotes native plant species, and reduces maintenance needs.

Graywater Guidelines, 2010 City of Berkeley Green Building Initiative developed guidelines for Graywater Reuse for Outdoor Use. Graywater Reuse is the practice of diverting untreated household wastewater (from hand-washing, laundry, and bathing) from the sanitary sewer to irrigate outdoor plants and landscapes. While no City permits are required for property owners and residents to install clothes washer graywater systems (also known as “laundry-to-landscape”), other types of graywater systems, which require plumbing alterations and/or pumps must be permitted by the City. Graywater cannot be stored and must be used for sub-surface irrigation (i.e. 2” cover of mulch, rock, or soil at the irrigation emission points). Graywater must be contained on the site where it is generated and cannot be allowed to pond or run-off. The benefit of using non-potable water for non-potable uses saves money on water bills, conserves potable water, and helps to replenish local aquifers.

More information about COB graywater permitting requirements can be found at www.cityofberkeley.info/planning. More information about the California Plumbing Code can be found at www.hcd.ca.gov/codes/shl/2007CPC_Graywater_Complete_2-2-10.pdf.

Rainwater Harvesting Guidelines, 2010 the City of Berkeley Green Building Initiative developed guidelines for Rain Water Harvesting. Rainwater Harvesting is the practice of collecting rainwater from rooftops and other aboveground surfaces and storing it for later use. The stored water can be used for non-potable uses such as landscape irrigation and toilet flushing. Rainwater harvesting systems can be as simple as a barrel at the end of a downspout, or as complex as underground cisterns with pumps and filtration measures. For any rainwater harvesting system capturing more than 100 gallons per downspout, City permits and zoning certificates are required. Rain barrels and cisterns must: be labeled “non-potable”, discharge overflow to a safe location, be structurally sound, be screened to prevent mosquito breeding, be child safe, and be cleaned annually with a non-toxic cleaner. The benefits of rainwater harvesting include potable water conservation, non-chlorinated water for gardening, and lot-level stormwater runoff volume reductions.

More information about COB Rainwater harvesting guidelines and permitting requirements can be found at www.cityofberkeley.info/planning.

Integrated Pest Management (IPM), the City has maintained an IPM approach since 1988 with its Revised Pest Management Policy, Resolution No. 54,319-N.S. which rescinded Resolution No. 52,739-N.S. The policy assumes that pesticides are

hazardous to human and environmental health, thus non-chemical management tactics should be employed first. Use of chemicals is to be considered as a last resort and must follow the Pesticide Selection Criteria established in the resolution.

City of Berkeley General Plan, 2002 a comprehensive, long range, and internally consistent statement of policies for the development and preservation of Berkeley. It is a statement of community priorities and values to be used to guide public decision-making in future years. The General Plan is a compilation of goals, objectives, policies, and actions designed to manage change. Decisions made by City Council, its advisory boards, and commissions about the physical development of the city should be consistent with the goals, objectives, and policies of the General Plan. The policies of the General Plan apply to all property, both public and private, within Berkeley city limits.

The General Plan identifies seven major goals:

1. Preserve Berkeley's unique character and quality of life
2. Ensure that Berkeley has an adequate supply of decent housing, living wage jobs, and businesses providing basic goods and services
3. Protect local and regional environmental quality
4. Maximize and improve citizen participation in municipal decision-making
5. Create a sustainable Berkeley
6. Make Berkeley a disaster-resistant community that can survive, recover from, and thrive after a disaster
7. Maintain Berkeley's infrastructure, including streets, sidewalks, buildings, and facilities; storm drains and sanitary sewers; and open spaces, parks, pathways, and recreation facilities

<http://www.ci.berkeley.ca.us/contentdisplay.aspx?id=488>

Pedestrian Master Plan—adopted 2009 identifies specific projects, programs, and implementation measures to *create a model bicycle- and pedestrian-friendly city where bicycling and walking are safe, attractive, easy, and convenient forms for transportation and recreation for people of all ages and abilities* (General Plan, Objective Six of Transportation Element). This plan builds on both the General Plan and the 2004 Council-adopted Pedestrian Charter, which outlines the principles of accessibility, equity, health and well-being, environmental sustainability, personal and community safety, community cohesion and vitality.

Of particular importance to the WMP are the Pedestrian Plan's goal of planning building and maintaining a pedestrian supportive infrastructure. Action elements associated with this goal include:

- Prioritizing pedestrian-serving public improvements, such as sidewalk repair, sidewalk widening, and street trees (Policy 1.1, Section A)

- Maintaining accessible travel path for all pedestrians at all times (Policy 1.2, Section 1)
- Developing incentives for commercial property owners to provide pedestrian features into new projects (Policy 1.2, Section 4b)
- Encouraging the creation of accessible pedestrian medians or islands in wide streets where people must cross more than two lanes (Policy 2.2, Section D)
- Maintaining a minimum 50-ft red, no-parking zone adjacent to the intersection to increase visibility (Policy 2.3, Section A.5)

Climate Action Plan, adopted 2009—the implications of global warming include potentially severe economic, health, social, and environmental consequences, both locally and worldwide. In 2006, 81% of Berkeley voters passed Measure G, which established a goal of 80% reduction in the Berkeley community’s greenhouse gas emissions by 2050 and called for the development of a plan to achieve this goal. The Climate Action Plan (CAP), developed by the Planning Department’s Office of Energy and Sustainability, recommends numerous strategies for the following categories of action:

1. Sustainable Transportation and Land Use (TLU)
2. Building Energy Use (BEU)
3. Waste Reduction & Recycling (WRR)
4. Community Outreach & Empowerment (COE)
5. Adapting to Climate Change (ADP)

Specific strategies within the category of Adapting to Climate Change that may have bearing on watershed management planning and policies include:

1. Examine potential of developing new, local groundwater sources for non-potable uses (such as toilet flushing, irrigation, showering) (CAP, ADP, B-1)
2. Encourage water recycling and graywater use through development of outreach materials and local guidelines (CAP, ADP, B-2)
3. Encourage use of water conservation technologies such as cisterns through development of local guidelines (CAP, ADP, B-4)
4. Encourage the public and private sectors to use sustainable landscaping techniques that require less water and energy to maintain (CAP, ADP, B-5)
5. Increase public awareness about climate change impacts to water supplies and riparian and coastal habitats, as well as promoting water-use efficiency strategies to residents and businesses (CAP, ADP, B-6)
6. Use development review to ensure new development does not contribute to increased flood potential (CAP, ADP, C-1)
7. Design public improvements, such as streets, parks, and plazas, for retention and infiltration of stormwater by diverting urban run-off to bio-filtration systems (CAP, ADP, C-2)

8. Expand local tree planting efforts and continue to maintain existing trees by providing guidelines and local outreach to residents, businesses, and public institutions (CAP, ADP, C-3)
9. Maximize permeable surfaces in both greenscape and hardscaped areas for stormwater infiltration and retention (CAP, ADP, C-4)
10. Encourage development of green roofs by providing local outreach and guidelines (CAP, ADP, C-5)

<http://www.berkeleyclimateaction.org/Content/10058/ClimateActionPlan.html>

Draft Downtown Area Plan (DAP)/Draft Streets and Open Space Improvement Plan (SOSIP), 2010: These are related documents that are considered draft until approved by City Council.

The Draft DAP is a long-range planning effort to guide future redevelopment in the Downtown area. The Draft DAP provides a suite of goals and policies aimed at making Berkeley's downtown a regional destination point with a unique concentration of housing, jobs, cultural and community uses, and commercial activity. The Draft DAP underpins these desired goals with policies promoting environmentally sustainable development. These sustainability policies include, 1) making Downtown a model of best-practices applicable to urban centers; 2) treating urban run-off, retaining stormwater, and attaining no net increase in run-off from the Downtown; and 3) promoting substantial water conservation and reuse as part of new construction, renovations, site improvements and landscaping.

The Draft SOSIP expands on the DAP's Streetscapes and Open Spaces planning elements. The SOSIP provides concept-level analyses of specific opportunity sites and design features such as lighting, signage, furnishings, landscaping, and stormwater management with the Downtown Area.