

December 20, 2018

To: Management Committee
From: Dan Cloak
Subject: Example Municipal Policies to Support Green Infrastructure Implementation

The Development Committee reviewed these example policies at a November 28 meeting.

MRP Provision C.3.j.i.(3) requires each Permittee to:

Adopt policies, ordinances, and/or other appropriate legal mechanisms to ensure implementation of the Green Infrastructure Plan in accordance with the requirements of this provision.

Item 15A in the “Green Infrastructure Planning Tasks, Roles, and Timeframes” document (most recent draft update is June 2018) is to:

Develop a model ordinance, policy or policies for Green Infrastructure Plan implementation.

During Development Committee discussions of Green Infrastructure Planning, it was noted that local policies need to be established in the following general areas:

- A municipal commitment to implementing Green Infrastructure.
- Requirements for private developments to implement Green Infrastructure in connection with street frontage improvements.
- An ongoing process to identify opportunities to retrofit existing transportation and drainage infrastructure.
- A process to evaluate opportunities and move projects into design and construction where appropriate and where resources allow.
- Development and adoption of guidelines for streetscape improvements and specifications and details for Green Infrastructure facilities (Provision C.3.j.i.(e) and (f)).

The Green Infrastructure Plans must be submitted with the 2019 Annual Report. Green Infrastructure policies will vary from Permittee to Permittee, and Permittees will need to choose the mechanism by which they establish each policy (that is, via ordinance, resolution, inclusion in the adopted Green Infrastructure Plan, departmental policy memoranda, etc.)

The attached draft example policies would provide a starting point for local staff to work from. The draft does not include policies related to the required “targets” for the amount of impervious surface, from public and private projects, to be retrofitted by 2020, 2030, and 2040 (Provision C.3.j.i.(c)). The Development Committee should continue discussion of “targets” while the scenarios for Green Infrastructure implementation are developed and modeled.

I have used the MS Word comment feature to annotate the policies with various references and explanations.

Example Municipal Policies to Support Green Infrastructure Implementation

Commitment to Implementing Green Infrastructure

The [Agency] is committed to shifting its conventional “collect and convey” storm drain infrastructure to more resilient, sustainable stormwater management that reduces runoff volumes, disperses runoff to vegetated areas, harvests and uses runoff where feasible, promotes infiltration and evapotranspiration, and uses natural processes to detain and treat runoff. This will include implementing, where and when feasible, Low Impact Development (LID) features and facilities such as pervious pavement, bioretention facilities (“rain gardens”), green roofs, and rainwater harvesting systems.

Commented [DC1]: This language draws on the language in the preamble of Provision C.3.j.

Green Infrastructure in New Development and Redevelopment Projects

The [Agency] uses its planning, zoning, and building authorities to require proposed new development and redevelopment projects to incorporate LID features and facilities in accordance with the New Development and Redevelopment (Provision C.3) requirements and the current edition of the Contra Costa Clean Water Program’s *Stormwater C.3 Guidebook*.

Commented [DC2]: This is consistent with what Permittees are required to do under MRP Provision C.3.b., consistent with their stormwater ordinances.

The [Agency] requires that the location and footprints of planned bioretention facilities are incorporated into site plans, landscaping plans, renderings, and improvement plans submitted for the [Agency]’s discretionary review. The [Agency] reviews construction plans and inspects construction of LID facilities to ensure the facilities are built in accordance with the criteria in the *Guidebook*. The [Agency] requires the owners of properties with LID facilities to agree to maintain the facilities in perpetuity and conducts periodic operation and maintenance inspections of built facilities.

Commented [DC3]: This language is consistent with the approach in the Guidebook and the requirements of Provision C.3.h.

During early planning of projects, feasibility studies, drainage reports, Initial Studies, and Environmental Impact Reports are required to demonstrate:

- Runoff from impervious roofs and pavement is dispersed to adjacent impervious areas where feasible and in accordance with the *Guidebook*.
- Bioretention facilities detain, retain, and treat runoff from remaining roofs and pavement.
- The bioretention facilities are in high-visibility, common, accessible areas and are integrated with site landscaping.
- Plans, drawings, and exhibits show the bioretention facilities at a level of detail consistent with the document.

Commented [DC4]: This language draws on Guidebook requirements and highlights practices that are consistent with effective implementation of LID on projects subject to the Permittee’s planning, zoning, and building authorities.

When reviewing applications for Provision C.3 compliance, the [Agency] considers the project scope to include any impervious surfaces added or replaced within the adjacent public right-of-way (street frontage improvements) in connection with the project. Applicants are required to evaluate the potential to direct runoff from paved areas within the adjacent public right-of-way to LID facilities located either within the right-of-way or on the parcel to be developed or redeveloped. Where it is feasible to do so, the project must be designed and built to incorporate these facilities. The [Agency] may require, as a condition of development approval, that the owner operate and maintain the facilities in perpetuity. Where previously existing pavement within the public right-of-way is made to drain to LID facilities, the square footage of that existing pavement may, at the [Agency]’s discretion, be credited toward square footage of new and replaced impervious area for which LID treatment is not provided.

Commented [DC5]: This statement is consistent with the current edition of the Guidebook (p. 6).

Commented [DC6]: This is recommended policy language and will need to be evaluated by each Permittee. The language anticipates various scenarios where street runoff may be directed to LID facilities either on the parcel or within the ROW.

List of Opportunities to Implement Green Infrastructure Retrofits

Commented [DC7]: This language is consistent with Provision C.3.e.i.

The [Agency] maintains a prioritized list of opportunities to retrofit streets and storm drains with Green Infrastructure. An initial list is in the [Agency]’s Green Infrastructure Plan (September 2019).

The list is updated continuously, or at least annually, with new opportunities:

- All new construction and substantial upgrades to [Agency] facilities, including public buildings, offices, stations, parking lots, and corporation yards, incorporate LID features and facilities in accordance with the New Development and Redevelopment (Provision C.3) requirements of the Municipal Regional Stormwater Permit. When the project includes street frontage improvements, and where feasible, the project is also designed so that street runoff is directed to LID facilities within the site or in the adjacent public right of way.
- All transportation projects for which the [Agency] is a sponsor or participant, including roadway widening or reconstruction, streetscape improvements, “complete streets” projects, traffic calming, safe routes to schools, and other projects that involve roadway reconfiguration, are evaluated for the potential to incorporate LID features and facilities.
- All storm drain projects are evaluated for the potential to incorporate LID features and facilities to treat stormwater and manage flows before discharge to streams or the municipal separate storm sewer system. Where appropriate, LID facilities are incorporated into projects to daylight or restore urban streams.
- The [Agency] has an ongoing process, affirmed in each adopted budget, to proactively review aspects of its storm drainage system to identify additional opportunities to incorporate LID features and facilities, with an emphasis on exceptional or low-cost opportunities.
- The [Agency] receives and adds to the list Green Infrastructure opportunities identified by the public.

Commented [DC8]: This is consistent with the requirements of Provision C.3.b.

Commented [DC9]: This is consistent with the requirements of Provision C.3.j.ii.

Commented [DC10]: This is consistent with the requirements of Provision C.3.j.ii. and the reporting forms in effect since the 2016 Annual Report.

Commented [DC11]: This is also consistent with the requirements of Provision C.3.j.ii. and the reporting forms.

Commented [DC12]: This is a suggested policy statement to demonstrate the Permittee’s commitment to implementing the Green Infrastructure Plan.

Commented [DC13]: This is a suggested policy statement to demonstrate the Permittee’s commitment to public outreach (Provision C.3.j.i.(4))

Where implementation of LID facilities has been found to be infeasible, an opportunity may be removed from the prioritized list.

Evaluation of Listed Opportunities for Green Infrastructure Retrofits

For new and substantial upgrades to [Agency] facilities, transportation projects, and storm drainage projects, whenever doing so can be made consistent with the project objectives, would be reasonably cost-effective, and would be technically feasible, the [Agency] will incorporate LID features and facilities into the preliminary design of the project. LID features will be incorporated in project final designs unless the incremental costs would prevent the project from being constructed.

Commented [DC14]: This suggested policy statement is crafted to demonstrate a strong commitment to incorporating Green Infrastructure in Permittee projects, while leaving room for an evaluation of overall feasibility and allowing an “escape hatch” if costs are prohibitive.

The [Agency] has an ongoing process, affirmed in each adopted budget, to evaluate opportunities on the list and to seek funding, including submittal of grant applications, for implementation.

Green Infrastructure Design Guidelines and Specifications

When determining design elements to be included in streetscape improvements and complete streets projects, project managers and designers will consult the National Association of City Transportation Officials (NACTO) *Urban Street Stormwater Guide*, the San Mateo County *Sustainable Green Streets and Parking Lots Design Guidebook*, and other resources available on the CCCWP website.

Commented [DC15]: This is a suggested policy statement crafted to demonstrate commitment to a mechanism that will lead to ongoing implementation of some Green Infrastructure projects.

LID features and facilities will be designed and constructed in accordance with the applicable specifications and criteria in the Contra Costa Clean Water Program’s *Stormwater C.3 Guidebook*. Additional details and specifications, as may be needed for design of street retrofit projects, may be adapted from the *San Francisco Public Utilities Commission Stormwater*

Requirements and Design Guidelines Appendix B (Green Infrastructure Details), the Central Coast Low Impact Development Institute Bioretention Standard Details and Specifications, or other resources compiled by the CCCWP and available through their website.

The [Agency] will participate in a countywide interagency process, convened by the CCCWP, to facilitate excellence and consistency in the design and construction of Green Infrastructure features and facilities. The [Agency] will:

- Share with other Contra Costa municipalities, through the CCCWP, conceptual, preliminary, and final plans and specifications developed for Green Infrastructure projects.
- Identify significant Green Infrastructure projects and issues encountered during design and construction of those projects and bring those projects and issues forth in online forums and in-person interagency workshops and meetings.
- Participate in evaluation and recommendation of design details and specifications for Green Infrastructure, where doing so furthers the purposes of countywide consistency and cost-efficiency, and quality of the built facilities.
- Participate, as a reviewer, in the drafting and updating of a Green Infrastructure Design Guide, the purpose of which will be to assist capital improvement projects staff in Contra Costa municipalities throughout the steps of project identification, evaluation, design, and construction.

Commented [DC16]: This language is intended to demonstrate a functional equivalence to having each municipality include in their Green Infrastructure Plan the guidelines and specifications required by Provisions C.3.j.i.(e) and (f).

Commented [DC17]: This proposes a process to address, as an ongoing project, the requirements of Provisions C.3.j.i.(e) and (f), via an approach discussed in the Development Committee.