



Legislation Details (With Text)

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Title: Discuss and Provide Direction on Potential Additional Water Runoff Reduction Measures in the City for New Commercial and Residential Construction (Community Development Director Tai).
DISCUSS AND PROVIDE DIRECTION

Sponsors:

Indexes:

Code sections:

Attachments: 1. Ordinance No. 15-0004

Date	Ver.	Action By	Action	Result
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TO:
Honorable Mayor and Members of the City Council

THROUGH:
Bruce Moe, City Manager

FROM:
Carrie Tai, AICP, Community Development Director
Dana Murray, Environmental Sustainability Manager

SUBJECT:
Discuss and Provide Direction on Potential Additional Water Runoff Reduction Measures in the City for New Commercial and Residential Construction (Community Development Director Tai).

DISCUSS AND PROVIDE DIRECTION

RECOMMENDATION:

Staff recommends that the City Council discuss and provide direction on potential additional water runoff reduction measures applicable to commercial and residential new construction.

FISCAL IMPLICATIONS:

There are no fiscal implications associated with this discussion. Should the City Council direct staff to develop and implement new regulations, costs related to added staff time and implementation will be incurred. It is anticipated that more stringent requirements would apply to a larger number of properties, requiring more review time. Furthermore, upfront costs associated with training and reference materials are expected. Any added costs of administering new regulations may be included in future permitting fees.

BACKGROUND:

On September 3, 2019, the City Council requested that staff and the Sustainability Task Force discuss options for expanding runoff requirements for new construction to zero discharge. During the discussion, City Council stated that they believed commercial properties are required to contain and treat runoff on-site and that they would be interested in modifying that requirement into a “zero discharge” requirement, and expanding it to include residential new construction. City Council referenced other existing zero discharge regulations for new construction such as those for the City of Santa Monica.

Stormwater runoff is generated when precipitation from rain events flow over land or impervious surfaces without percolating into the ground. Regulation of runoff is critical because, when it rains, stormwater runoff collects and transports pollutants, then flows into local storm drains, which run directly into the ocean without treatment. Los Angeles receives 100 billion gallons of runoff each year, flowing into the ocean and consisting of pesticides, herbicides, oil, grease, heavy metals, toxins, bacteria, and other contaminants originating from businesses, households, and roadways. Because Manhattan Beach receives a small amount of annual rainfall, pollutants collect over time and are washed in mass amounts into storm drains when storm events occur. When these pollutants end up in the ocean, they present a human health hazard and contaminate local beaches for several days after rainfall occurs, impacting public health and, indirectly, our economy.

Another form of runoff, known as dry weather runoff, occurs when water from landscaping practices or other outdoor uses flows off-site and into storm drains or streams. Certain nutrients found in fertilizers and pesticides are often present in this type of runoff. High quantities of these nutrients can lead to harmful algal blooms and fish kills when they end up in the ocean.

Manhattan Beach has enacted various measures and projects to reduce runoff and pollution, while also complying with stormwater regulations, both through increasing permeability and therefore reducing runoff, as well as reducing the pollutants present outside that could runoff during storm events. Business programs implemented by the City such as the MB Green Business Program and Clean Bay Restaurants facilitate compliance from businesses with runoff reduction. The majority of initiatives taken by the City to address drought and water conservation are also efficient methods of eliminating runoff. One example is the Model Water Efficiency Ordinance (MWELO) and the City’s Water Conservation Ordinance.

MWELO imposes water efficiency standards for new landscapes exceeding 500 square feet and retrofitted landscapes exceeding 2,500 square feet through encouraging the use of more efficient irrigation systems, graywater usage, and onsite storm water capture, and by limiting the portion of landscapes that can be covered in turf. Additionally, in 2015 the City adopted a permanent Water Conservation Ordinance (Ordinance No. 15-0008) prohibiting outdoor watering during most daylight hours on impermeable pavement following a rain event, and in a manner other than drip irrigation on new construction. Lastly, in 2015 the City of Manhattan Beach adopted Ordinance 15-0004 regarding storm water and urban runoff protection control, including project size thresholds to trigger Low Impact Development (LID) Best Management Practices (BMPs) in Section 5.84.100, meeting the

Regional Water Quality Control Board's requirements (Attachment).

LID BMPs are triggered in jurisdictions if a development project meets the identified size threshold, requiring that stormwater be captured on site and through infiltration (put it in the ground), harvesting and using it, or bio-retention systems to capture runoff and prevent it from running through the watershed to the ocean. Employing LIDs leads to successful rainwater capture during heavy storms, rather than allowing the water to flow into storm drains. Rainwater can be captured and used for irrigation purposes, or allowed to percolate and replenish the water table, depending on which LID measure is utilized. Both avoid contaminating nearby bodies of water, disturbing natural hydrology, wildlife habitat, and soil erosion; with additional, indirect benefits that include:

- Stormwater treatment through soil filtration and retention of pollutants
- Biological fixation of harmful pollutants
- Aesthetic aspects of facilities
- Feasibility of monitoring and inspection with above-ground facilities
- Quick-draining facilities do not harbor pests such as mosquitoes
- Similar landscape upkeep as other areas

Some examples of elements in a LID policy are: permeable asphalt, concrete or pavers for driveways; installing green (vegetated) roofs or green strips with native and adapted plants to capture stormwater and prevent pollutants from reaching the ocean; incorporation of infiltration beds (drywells) and basins to capture and treat stormwater; retention structures, such as terraces, curbs or berms, can be implemented to stop stormwater from flowing offsite; structures constructed to direct water to pervious/landscaped surface areas; utilizing passive rainwater management techniques, such as employing rain gardens, dry ponds and bioswales to decrease runoff.

DISCUSSION:

Local governments have the opportunity to adopt local regulations that exceed State and federal water quality and runoff reduction requirements. Many cities have done this through Low Impact Development (LID) policies or regulations. In mirroring the Regional Water Quality Control Board's requirements, the City's size thresholds are 10,000 square feet for new single-family residential development or public projects, and 5,000 square feet for most other development (Attachment).

Several cities in Los Angeles County have adopted LID ordinances going above and beyond regulatory requirements, including Hermosa Beach, Redondo Beach, Newport Beach, and Santa Monica. City Council specifically referenced Santa Monica's runoff requirements. In comparing Manhattan Beach and Santa Monica's requirements, staff found the main difference is the size threshold that triggers LID requirements. Santa Monica requires all new development to implement LID to reduce urban runoff (although with some exceptions), whereas Manhattan Beach has a size threshold before LID requirements are triggered.

Due to the size of a standard lot in the City, most residential development in the City does not trigger the LID requirements, and only some commercial development has to date. Approximately 192 properties zoned for single-family residential development exceed the 10,000 square-foot LID threshold; and approximately 318 commercial properties exceed the 5,000 square-foot LID threshold applicable to commercial development. Implementation of LID requirements on all new construction, as in Santa Monica, can assist the City in minimizing runoff discharge and pollutants. In Hermosa Beach, they have reduced the size threshold for residential development LID to 5,000 square feet.

There are some exemptions from LID related to feasibility that are worthy of consideration and would build in flexibility to any future regulations. The City could consider applying a “Runoff Reduction Fee” if a development project is unable to implement such techniques. Developers would essentially pay into a fee to treat stormwater off-site, which help fund a City project or area where capture and treatment is possible.

The Sustainability Task Force discussed runoff reduction measures in late 2019, early 2020, and again in June 2021, and supported City efforts to improve permeability in the City (both private and public land development), planting California native plants and drought-tolerant landscaping (akin to what Hermosa Beach included in their LID), and more enforcement of existing water conservation measures. The Sustainability Task Force expressed support for the City to go beyond regulatory agency requirements to reduce runoff in order to capture more stormwater, reduce water pollution, and reduce water consumption. In June 2021, the Sustainability Task Force recommended that the City develop a LID policy and remove the minimum size threshold to require LID for all new development similar to Santa Monica.

Cost Effectiveness and Practicality:

Many options for Low Impact Development are inexpensive yet effective manners of reducing runoff. Implementing LID techniques must be selected on a case-by-case basis, taking into account climatic characteristics and geographic elements. Some studies found that LID techniques had a higher upfront cost when compared to traditional development. In the same studies, it was also determined that residences with LID maintained their sale value better and presented fewer opportunity costs. Incorporating LID in the planning portion of new developments can drive the cost down, in comparison to adding LID once the structure has been constructed. The Los Angeles County Department of Public Works (LACDPW) conducted a Benefit-Cost analysis on several LID approaches and deemed that tree plantings, construction of infiltration basins, wetlands, and storm drain systems were the most cost-effective.

POLICY ALTERNATIVES:

Staff recommends that City Council discuss and provide direction on additional water runoff reduction actions that could be taken in the City.

Option One: Create a new Work Plan item directing staff to research new Low Impact Development (LID) regulations, as they relate to new construction. This could include eliminating the project size threshold, similar to actions taken by Santa Monica. This would increase the percentage of permeability for all new construction in Manhattan Beach, thereby reducing stormwater runoff.

Option Two: Continue with business as usual and not add any additional runoff regulations to new construction. Currently, Manhattan Beach has Ordinance No. 15-0004 requiring certain new developments to retain or filter stormwater runoff, which matches the Regional Water Quality Control Board's requirements.

PUBLIC OUTREACH:

Should City Council direct staff to pursue additional runoff regulations in the above options, staff would work with the Sustainability Task Force, regulatory agencies, the construction and building community, and community groups on public outreach associated with any above policies or actions.

ENVIRONMENTAL REVIEW:

The City Council's discussion of existing and potential regulations is not a "project" as defined under Section 15378 of the State California Environmental Quality Act (CEQA) Guidelines; therefore, pursuant to Section 15060(c)(3) of the State CEQA Guidelines, the activity is not subject to CEQA. Thus, no environmental review is necessary. In the event that the City Council directs staff to prepare amendments to the Municipal Code, at that time, said activity would be subject to CEQA.

LEGAL REVIEW:

The City Attorney has reviewed this report and determined that no additional legal analysis is necessary.

ATTACHMENT:

1. Ordinance No. 15-0004