

WATER RUNOFF REDUCTION

SEPTEMBER 9, 2021



BACKGROUND

- September 2019 - City Council requested that staff and the Sustainability Task Force discuss options for expanding runoff requirements to zero discharge for new construction.
- Study whether properties are required to:
 - contain runoff
 - treat runoff on-site
- Referenced zero discharge regulations for new construction, such as those for the City of Santa Monica.



BACKGROUND – WATER RUNOFF

- Stormwater runoff
 - Precipitation from rain events flow over impervious surfaces without percolating into the ground.
- Dry weather runoff
 - Water from landscaping or other outdoor uses
 - Flows off-site and into storm drains or streams
 - Fertilizers, pesticides, bacteria



BACKGROUND – CURRENT MEASURES

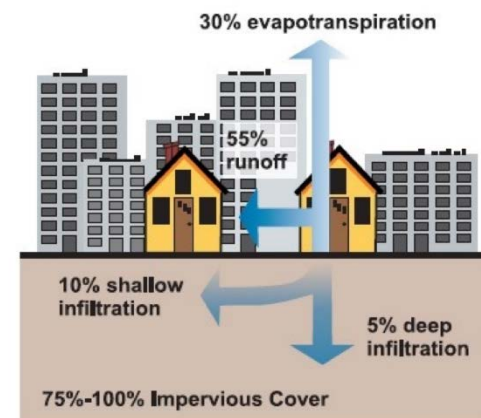


- Stormwater and Urban Runoff Protection Control Ordinance (Ordinance 15-0004)
- Business programs to facilitate compliance with runoff reduction
 - MB Green Business Program
 - Clean Bay Restaurants
- Actions taken by the City to address drought and water conservation are also efficient methods of eliminating runoff.
 - Model Water Efficiency Ordinance
 - Water Conservation Ordinance

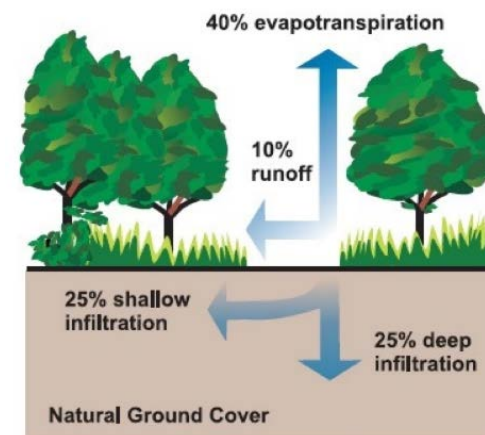


LOW IMPACT DEVELOPMENT (LID)

- Local governments can adopt Low Impact Development (LID) policies
- LID principles are to design sites to capture water to reduce runoff
- Employing LID leads to rainwater staying on site, rather than flowing into storm drains.
- LID projects usually include:
 - Percolation to replenish the water table;
 - Captured and used for irrigation; or
 - Bio-retention systems



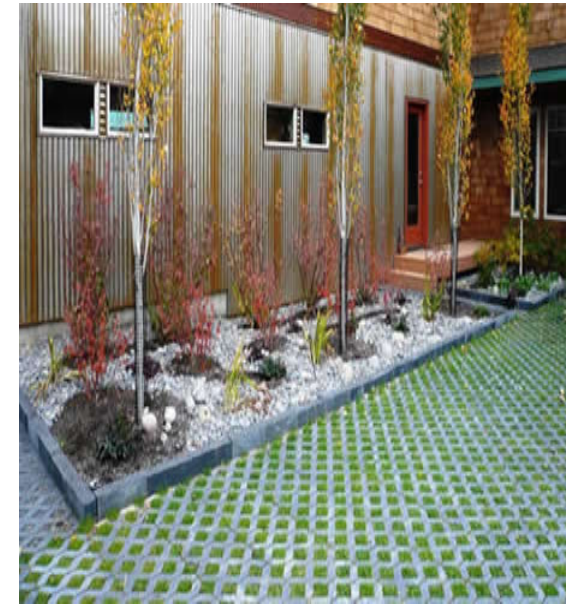
Developed Watershed



Undeveloped Watershed

LOW IMPACT DEVELOPMENT- MB

- MB adopted Ordinance 15-0004 includes project size thresholds to trigger LID Best Management Practices (BMPs)
- Most residential development in the City does not meet the threshold for triggering LID requirements, and only some commercial development has.
- In MB, the size threshold is typically:
 - 10,000 square feet of impervious surface for new residential development or public projects
 - 5,000 square feet of impervious surface for some new commercial development



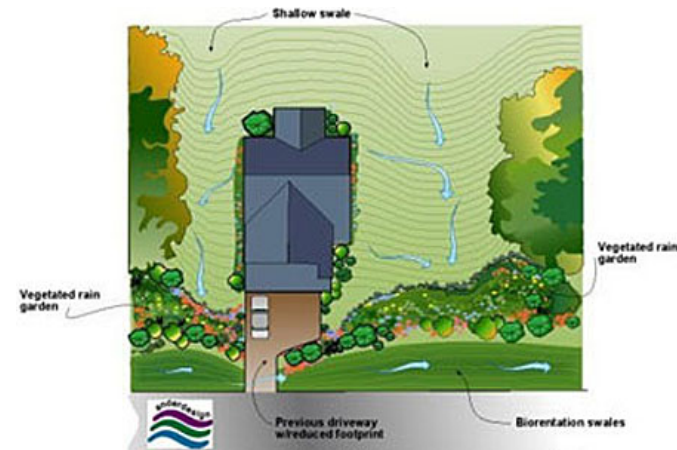
LOW IMPACT DEVELOPMENT

- Cities that have LID ordinances - Hermosa Beach, Redondo Beach, Newport Beach, and Santa Monica.
- Santa Monica's runoff requirements have no minimum threshold size to trigger LID requirements - all new development requires LID to reduce urban runoff (with some exceptions for feasibility).
- Manhattan Beach has a size threshold of impervious surface before LID requirements are triggered.
- Santa Monica has a "Runoff Reduction Fee" if a development is unable to implement LID techniques.
 - Developers pay into a fund to treat stormwater off-site, helping fund city stormwater treatment projects



SUSTAINABILITY TASK FORCE

- MB's Sustainability Task Force (STF) discussed runoff reduction measures and supported:
 - Efforts to improve permeability in the city
 - Planting California native plants and drought-tolerant landscaping (akin to Hermosa Beach's LID)
 - Renewed education and compliance of existing water conservation measures.
- Supported going beyond State regulatory agency requirements to reduce runoff



The STF specifically supports removing the size threshold for LID for new development in Manhattan Beach, similar to what Santa Monica has done. WBDG



RECOMMENDATION & OPTIONS

- Staff Recommendation: 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 for new construction. This could include eliminating the project's impervious surface size threshold. *Sustainability Task Force recommendation.*
- *Option Two:* Continue with business as usual and not add any additional runoff regulations to new construction.

