

**Resolution of the California Ocean Protection Council
Regarding Low Impact Development
May 15, 2008, as amended**

WHEREAS, ocean water quality is critical to the health of marine and coastal ecosystems; and

WHEREAS, ongoing, traditional development of California's watersheds continues to replace natural landscapes with impervious surfaces; roads and parking lots make up about half of all impervious surfaces; and

WHEREAS, runoff from urbanized areas contains and transports pollutants – including trash, heavy metals, oil and grease, fertilizers, and pathogens – to the ocean; and

WHEREAS, these pollutants contribute to beach closures, harmful algal blooms and reduced fish populations; and

WHEREAS, increased runoff from urbanized landscapes also erodes stream banks and damages habitat for fish and a wide variety of plants and animals; and

WHEREAS, polluted runoff impacts California's \$46 billion, tourist-oriented, ocean-dependent economy; and

WHEREAS, rainwater is a valuable resource which should be conserved; and

WHEREAS, the Clean Water Act and Porter-Cologne Water Quality Control Act require that California reduce stormwater pollutant discharges from municipal storm drains, new developments and redevelopments, construction sites, Caltrans facilities, and industrial facilities; the Porter-Cologne Act also requires a California Ocean Plan for water quality regulation of ocean water, and prohibits waste discharges to Areas of Special Biological Significance (ASBS) which comprise one-third of the State's coastline; and

WHEREAS, the California Coastal Act requires that development in the coastal zone maintain and, where feasible, restore the biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes; and

WHEREAS, Low Impact Development (LID) is a stormwater management strategy aimed at maintaining or restoring the natural hydrologic functions of a site to achieve natural resource protection objectives and fulfill environmental regulatory requirements; LID employs a variety of natural and built features that reduce the rate of runoff, filter pollutants out of runoff, and facilitate the infiltration of water into the ground; and

WHEREAS, by reducing water pollution and increasing groundwater recharge, LID helps to improve the quality of receiving surface waters and stabilize the flow rates of nearby streams; and

WHEREAS, LID design detains, treats and infiltrates runoff by minimizing impervious area, using pervious pavements and green roofs, dispersing runoff to landscaped areas, and routing runoff to rain gardens, cisterns, swales, and other small-scale facilities distributed throughout a site; and

WHEREAS, LID designs can alternatively, or in conjunction with the techniques set forth above, capture, retain, and treat stormwater for onsite reuse, such as for irrigating landscaping; and

WHEREAS, a recent U.S. Environmental Protection Agency report concluded that LID drainage designs can cost 15% to 80% *less* than more conventional drainage designs; other studies have shown LID facilities are less expensive to maintain than conventional stormwater treatment facilities; and

WHEREAS, LID has also been shown to help reduce the frequency of combined sewer overflows, which plague at least one major California coastal community; and

WHEREAS, other states and federal government departments, including the Department of Defense, have been leaders in advancing LID implementation faster than California; and

WHEREAS, Caltrans should continue its efforts to lead in innovative stormwater design approaches; and

WHEREAS, some local governments are concerned that they lack sufficient funds to maintain and improve existing drainage infrastructure and fully implement stormwater pollution prevention programs; and

WHEREAS, in 2005, the Local Government Commission adopted the Ahwahnee Water Principles for Resource-Efficient Land Use, which state in relevant part that “community design should be compact, mixed use, walkable, and transit-oriented so that automobile-generated urban runoff pollutants are minimized and the open lands that absorb water are preserved to the maximum extent possible” and that “impervious surfaces such as driveways, streets and parking lots should be minimized so that land is available to absorb stormwater, reduce polluted urban runoff, recharge groundwater, and reduce flooding”; and

WHEREAS, the California Ocean Protection Act mandates that the Ocean Protection Council (OPC) – made up of the Secretaries for the Resources Agency and Cal/EPA, the chair of the State Lands Commission, one designee each from the California Senate and Assembly, and two public members appointed by the Governor – coordinate and improve the protection of California’s ocean and coastal resources; and the Governor’s Ocean Action Plan calls for the OPC to play a leadership role in managing and protecting California’s oceans, bays, estuaries, and coastal wetlands, including integration of coastal water quality programs to increase their effectiveness.

NOW, THEREFORE, the California Ocean Protection Council hereby:

RESOLVES to promote the policy that new developments and redevelopments should be designed consistent with LID principles so that stormwater pollution and the peaks and durations of runoff are significantly reduced and, in the case of a new development, substantially the same as before development occurred on the site; and

RESOLVES to promote the retrofit of existing impervious areas throughout California with LID in all appropriate circumstances, and to support the Ahwahnee Water Principles for Resource-Efficient Land Use as described above; and

FINDS that LID is a practicable and superior approach that new and redevelopment projects can implement to minimize and mitigate increases in runoff and runoff pollutants and the resulting impacts on downstream uses, coastal resources and communities; and

RESOLVES to distribute this resolution widely, sending it to mayors, boards of supervisors, and appropriate agency managers of all coastal cities and counties and to appropriate federal agencies including resource protection agencies, the Army Corps of Engineers and the Department of Defense; and

FURTHER RESOLVES to advance LID implementation in California using the following approaches:

1. State Leadership

- a. *State Government Leadership on LID* – For all state-funded (including bond-funded) development projects greater than one acre, LID should be considered to be the best

- available technology standard for reducing pollutants from stormwater discharges. All existing State facilities should consider retrofitting to meet LID objectives, whenever feasible. The California Environmental Protection Agency (Cal/EPA) and the California Resources Agency should assemble the relevant boards and departments within their agencies to develop a set of LID standards to be used in development projects built with state funds, including bond funds.
- b. *Department of Transportation (Caltrans)* – Caltrans is encouraged to continue to develop details and specifications for permeable pavements and other LID features and to incorporate LID where feasible in projects Caltrans funds or oversees, including local assistance programs. Caltrans should consider allocating a percentage of project budgets to the implementation of stormwater controls, with LID features as the highest priority. Caltrans should evaluate and revise as necessary any design standards which unnecessarily inhibit implementation of LID, such as street widths, required pavement and other materials, curb designs, and minimum parking requirements.
 - c. *Office of Planning and Research* – The Office of Planning and Research (OPR) is encouraged to provide technical guidance to public agencies to promote the use of LID consistent with stormwater National Pollution Discharge Elimination System (NPDES) standards and criteria. The guidance should be provided through an OPR technical advisory and revisions to the OPR guidance for preparation of local general plans, as appropriate. OPR is also encouraged to work with the Resources Agency to develop proposals for future CEQA Guideline amendments that encourage consideration of LID in the CEQA review process.
 - d. *Building Standards Commission* – The Building Standards Commission is encouraged to incorporate LID objectives and methods, and to incorporate or reference applicable NPDES permit criteria for stormwater treatment, flow control and use of LID in ongoing development of its Green Building Standards.
 - e. *Department of Water Resources* – The Department of Water Resources (DWR) is encouraged to provide incentives for LID implementation and habitat protection goals in its integrated regional water management (IRWM) and stormwater flood management funding programs to encourage watershed resource protection. The OPC encourages DWR to adopt language to include the fostering of LID as a Program Priority in their draft IRWM guidelines.

2. State Regulatory Actions

- a. *State Water Board LID Policy* – The State Water Board is encouraged to adopt a statewide policy for addressing all elements associated with changes in runoff due to hydromodification impacts, including those specifically related to urbanization. This policy would include direction on when and how to use LID to avoid, minimize and mitigate runoff so that downstream water bodies are protected.
- b. *NPDES Permit Requirements* – When crafting stormwater NPDES permit requirements, the State Water Board and Regional Water Boards should ensure that LID designs are utilized as the primary approach to satisfying post-construction runoff control requirements and that LID designs can be utilized to control pollutants and the rate and volume of runoff.
- c. *LID Performance Evaluation and Monitoring* – Together with the Coastal Commission, the State Water Board is encouraged to conduct ongoing evaluation of the effectiveness

of their regulatory programs that promote LID (and other, similar approaches) implementation in regulated new development and redevelopment projects.

3. Incentives, Technical Support, and Research

The OPC will consider the following approaches, proposed by stakeholders and participants in public workshops sponsored by the OPC, to promote LID and to leverage funding with other agencies.

- a. *Local Streets and Drainage Retrofits* – Encourage local governments to retrofit existing streets, highways, municipal parking lots, public buildings, and drainage systems with LID where feasible. Promote and consider funding research and technology transfer related to the retrofit of local facilities, including demonstration projects with interpretive displays and technical documentation of results.
- b. *Technical Assistance to Local Government* – Promote and consider funding technical assistance for local agency public works, planning and engineering management and staff in the use of LID.
- c. *Research and Development of LID* – Promote and consider funding technical research for development of a LID design manual, including example designs and specifications for LID features, and post-construction evaluations of the effectiveness of constructed LID features in removing pollutants and controlling runoff flows.
- d. *Updating Local Development Policies* – Assist and consider funding for local governments to update standard details and specifications and other development policies to promote LID and remove barriers to LID.
- e. *Local Incentives* – Promote local programs that provide incentives, including reduction of stormwater utility fees, to encourage the use of cisterns, rain gardens, and other LID strategies to retain runoff and, where feasible, reuse runoff for irrigation.
- f. *Incentives for Stormwater Recharge* – Encourage water agencies to offer economic incentives for new regional and sub-regional stormwater recharge projects similar to incentives currently provided for water conservation and water reuse.