

low impact design: creating a habitat

Low impact design (LID) is a phrase you'll increasingly hear mentioned. In broad terms, it means bringing nature into an urban environment.

"We need to do a better job of co-existing with nature," says ARC stormwater action team leader Earl Shaver. "All of Western society is based on consumption. We need to change that philosophy to protect the environment for our kids. We have to change our approach to land use away from land development, which is based on consumption, to one that is more aimed at protection, preservation and enhancement."

The Auckland Regional Council's Low Impact Design Manual for the Auckland Region defines low impact design as 'a design approach for site development that protects and incorporates natural site features into erosion and sediment control and stormwater management plans'.

LID is a philosophy that reflects a shift in thinking. Instead of fitting land to suit a development, an LID approach fits the development to suit what the land can tolerate. Stormwater impacts, for example, might be a determining factor in site development. For instance, a pole house might be designed for a very steep site, rather than cutting into the earth. Ideally, such factors should be integrated early in the site planning process.

So, when planning a new home, those thinking LID look carefully about how they can incorporate the natural features of the site, and how they can be protected from erosion and from stormwater run-off. And they study this to a greater degree than is currently required under the various codes of compliance.

"If you have a site, think in terms of creating a habitat," says Shaver. "Try to protect the natural features, such as a nice piece of bush or a wetland. They provide value to the downstream area. Wetlands filter pollutants. Trees, because of their evapo-transpiration, also reduce run-off."

"Most of us live in fairly sterile environments, where the landscape is dominated by buildings, streets, footpaths and other impervious surfaces. We are, for the most part, disconnected from nature. Only by preserving something of the natural environment can we retain a sense of place, an identity with the land, and have a distinctive sense of being part of our region." **H**

For more on LID and the part it plays in urban design in New Zealand and Australia, visit:
www.landcareresearch.co.nz/research/urban/liudd/.