

# **Save Our Brisbane Suburbs**

Part of the Australia wide *Save Our Suburbs* network

Factsheet #2

## **Why protect our creeks and wetlands while destroying others?**

As the impacts of previous planned and promoted development become more obvious and new government policies which aim to avoid such impacts become increasingly diverse, it is inevitable the various policies will be in conflict. This is one of a series of factsheets which raise and discuss a number of "issues" where the conflicts are obvious, the new policies only increase conflict with other policies and where, contrary to the view promoted by governments, local community interests and knowledge are increasingly excluded. If it is the role of "local" governments and authorities to address and protect the local, why are they not so doing?

**History** Creeks and wetlands are natural responses to need. They respond to climate, topography etc in a natural way, usually reaching a relatively adequate stable state capable of withstanding extremes primarily of drought or of flood. Unfortunately, engineering efficiency allows vast increases in the volume of stormwater and thus, to accommodate increased development, conversion of creeks and wetlands into piped or open drains is seen as a solution. However, as recent local flooding has shown in Brisbane (and many other places), while drains are a solution, being based on a limited set of engineering assumptions, when the assumptions are exceeded, drains have no capacity ... and flooding is inevitable.

**The problem** Local authorities increasingly produce planning policies which promote more and/or increased intensity of development. The result is an increasingly engineered stormwater system but with reduced capacity for excess capacity as in short periods of intense rainfall. With increased development intensity, the runoff rate increases further due to the increase in impervious surfaces (roofs, parking areas, driveways and roads) and a corresponding decrease in absorption and soakage into the ground and a decrease in "ponding" (soft landscape and ground surfaces which impede the flow of water thus reducing the runoff rate). The combination results in a dramatic increase in vulnerability to flooding in high intensity rainfall which is usually described as "freakish" or rare but in practice, even if it is rare, is inevitable. To ignore such inevitability is to ensure that some people will be increasingly flooded, not because of the increasing occurrence of the "rare" rainfall events, but because the urban drainage system cannot cope with the increased intensity due to increased development, exacerbated by the fact that increasing runoff flowing at a faster rate will carry away more debris ... to a point where debris can cause "dams" to block the flow .. another cause of local flooding. Obviously, increased development is the cause, what is the solution?

**Solutions?** The cost of stormwater systems capable of carrying the "rare" runoff event should be included in the development cost, not hidden until a problem occurs then met out of the public purse eg by flood "mitigation" works. Similarly, unsuspecting tenants may assume local authorities would not allow development in flood zones. Nothing could be further from the truth as shown by recent projects involving extensive filling of flood zones for development. Insurance is not an answer either as this effectively moves the cost from those causing the problem or at risk from flooding ... to those who are not. Each of these is a subsidy created by local authorities failing to ensure development meets its full cost then further subsidised from the public purse after floods. The solution? Catchment management applies to all stormwater systems. Development should be restricted to the "natural" catchment capacity.