

Swan Region Strategy

for

Natural Resource Management

Appendix 9

**Water Sensitive Design Planning and Management
Principles**

Water Sensitive Design Planning and Management Principals

- It is much more efficient and cost effective to incorporate water resource issues early in the land use planning process than to address them later.
- Water resource management should be addressed at the catchment or sub-catchment level.
- Stormwater management is part of total water resource management.
- Where possible the components of stormwater management should follow natural contours with the management system incorporating as much as possible of the features and functions of the natural stormwater system which is largely capital, energy and maintenance cost free.
- Subject to meeting water resource management objectives in respect to assigned beneficial uses the post urban development conditions should approximate pre-urban conditions.
- Local on-site storage and utilization of run-off should be maximized.
- Wherever possible storage areas should be an integral component of the urban landscape.
- Stormwater management systems should emphasize the use of vegetation (particularly indigenous vegetation) to promote filtering, and slowing of run-off to pre-development conditions.

Water Sensitive Objectives.

- To manage water balance
 - to maintain appropriate aquifer levels, recharge and stream-flow characteristics in accordance with assigned beneficial uses,
 - to prevent flood damage in developed areas, and
 - to prevent excessive erosion of waterways, slopes and banks
- To maintain and, where possible, enhance water quality
 - to minimize waterborne sediment loading,
 - to protect existing riparian or fringing vegetation,
 - to minimize the export of pollutants to surface or groundwater's, and
 - to minimize the export and impact of pollution from sewerage.
- To encourage water conservation
 - to minimize the import and use of scheme water,
 - to promote the re-use of stormwater,
 - to promote the re-use and recycling of effluent,
 - to reduce irrigation requirements, and
 - to promote regulated self-supply.
- To maintain water related environmental values.
- To maintain water related recreational and cultural values.