<u>Review of Literature on Land Use Planning on Regional</u> <u>Foreshore Reserves in the</u> <u>Guildford Area.</u>

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Background.

The reservation of river parklands in the Guildford area has an interesting history defined and limited through a variety of State and Local planning studies and Acts.

The first planning strategy to consider foreshores in the Perth region was the Stephenson- Hepburn study of 1955. This study introduced concepts of public access and equity in use of the river and its parklands. *The Plan for the Metropolitan Region, Perth and Fremantle (Stephenson – Hepburn 1955)* formed a blue print for development in many facets of planning including, residential, commercial and industrial land usage, road networks and access and use of waterways.

1. The Plan for the Metropolitan Region, Perth and Fremantle (1955)

This study distinguished between Local, District and Regional open spaces. It is the Regional Open Spaces that will be considered here, as these are the net works that incorporate the river foreshores of the Swan, Canning and Helena Rivers. The determination of Regional Open Space was open ended,

> '...not subject to imposition of theoretical standards. The quantity and distribution derives largely from an examination of areas considered Suitable for particular uses'. (Stephenson G. - Hepburn 1955 p95)

This qualitative approach to determining Regional Reserves and their uses has resulted in a number of inconsistencies and conflicts that have become more evident over time with improved technology and understanding of the hydrology of the river systems. (See Porter. C. 2002)

Stephenson and Hepburn sought to formalise the planning of the Swan River that had previously,

.... 'afforded a large measure of protection from development which would otherwise have denied the public access to its banks.' (Stephenson – Hepburn 1955 p97)

Contained in this statement is the notion of social equity in accessing the river and its banks. River access was seen as a public right. This concept of *'public right'* to all the metropolitan river foreshores is a unique planning concept to

Western Australia. This singular concept has been criticized for overriding environmental issues and placing a priority on acquisition rather than maintenance of foreshore lands (Porter. C. 2002). *The Brundtland Report* of 1987- *Our Common Future* argued for development to be sustainable and to acknowledge three fundamental principles of environmental protection, economic growth and social equity.

The acceptance of these principles had been foreshadowed earlier in Perth metropolitan planning in *The Eastern Corridor Report (Taylor, R. – Burrell, W. 1978)*

2. The Eastern Corridor Report (1978)

This report acknowledged the importance of environment in planning. It noted that space had three components physical capacity, an ecological capacity and psychological capacity – it was argued that all three of these components needed to be considered when working with space and public open space. Taylor and Burrell acknowledge many environmental principles not previously elaborated on eg. the importance of access at some point to reserves but also noted

Some picnic spots need to be accessible but less acceptable ones are also warranted. When people are looking for open space and undeveloped bushland, there is no need to spoil it with a consciously planned road network. (Taylor.R.- Burrell.W. 1978)

They argued for a complimentary relationship between planning and conservation, acknowledging that in sensitive areas conservation principles may need to dominate.

They recommended an *Open Space* concept for the Midland area, of river parklands, links to space systems, and a variety of recreational uses The importance of protecting the environment was further developed in *The System Six Study Report (1981)*.

3. System Six Study Report (1981)

This report was prepared for the Western Australian Environmental Protection Authority by the System Six Committee. As an environmental study in Western Australia it 'broke new ground' by conducting broad investigations and proposed new ways of balancing idealistic and practical considerations and reconciling conservation and development. It acknowledged the importance of putting aside land for conservation purposes, developing less sensitive areas and increasing expenditure for the management of both. *(System Six Study 1981 p14)* Funding for land acquisition was achieved through a special statute- *The Metropolitan Region Improvement Tax Act 1959 (WA)* The role of the Metropolitan Regional Planning Authority as defined under its Act was for coordinating and planning open spaces rather than ongoing management *(System Six Study 1981 p39)*. The study noted,

It is not possible or desirable to bring all potential public open space into public ownership, if only because of because of the prohibitive costs of acquisition and management. (System Six Study 1981 p31)

The report argued that *Linear Parks* needed particular consideration. These parks were environmentally sensitive because of their location along the river foreshores. It was necessary to ensure that activities within the *Linear Parks* were based on three objectives;

to protect the riverbanks and retain remaining natural vegetation fringing the banks;
to provide for public access to the rivers and recreation of low impact on the environment;
to provide a continuous trail for pedestrians, cyclists and equestrians to move through the open space.
(System Six Study 1981 pp 42-43)

The *System Six Study* recommended that Linear parks should extend along at least one bank of the Swan River (1981 p43 10 ii), there should be legislation to achieve planning and conservation without necessitating public acquisition of land (1981 p36 5 i), a secretariat should be set up to manage open space (1981 p36 5 iii), the need to establish adequate funding for the above purposes (1981 p36 5 ii)

4. Swan River Trust Act (1988)

In 1988 *The Swan River Trust Act* was passed by State Parliament to establish a Trust to manage the Swan River. The Trust worked in an advisory role to the Minister for Environment, the West Australian Planning Commission and to Local Government. The Trust succeeded two prior river management authorities-The Swan River Conservation Board (1976) and the Swan River Management Authority (1988). The trust receives limited funding and is responsible for maintenance of all foreshores, policing and management of the Swan, Canning and Helena Rivers. With its limited funding it is not responsible for the management of flood plain land, this falls under varied jurisdictions including of Local Government authorities, the Department of Planning and Infrastructure, Department of Conservation and Land Management, and private owners. The maintenance of the floodplains on the Swan, Helena and Canning Rivers is funded by the West Australian

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Planning Commission. This agency has limited resources and through necessity has to consider issues of weed control, reduction of fire risk (Bush Fires Act 1954) and public liability issues as high priority. The resultant management practises have been the cause of public concern (Guildford Association Inc 2009).

5. Metroplan (1990)

In 1990 *Metroplan* was developed as the scheme to take metropolitan planning forward into the future. Like its predecessor, the Stephenson-Hepburn Plan it took a broad and eclectic approach to planning, acknowledging the changes and growth that had occurred and was projected to continue. Regional Open Space was noted to have expanded since its inception in 1963 to approximately 14,350 hectares of publicly acquired open space. It argued for a comprehensive approach to planning Regional Open Space seeking to consolidate and enlarge parklands; the interlinking of Regional Parks to facilitate public access to waterways and the protection of landscapes and environmental areas. This document was essentially a planning not an environmental document and did not greatly progress the work and ideals of the *System Six Study*.

6. Swan and Canning Rivers Management Act (2006)

The Swan and Canning River Management Act was passed by the State Parliament in 2006 to replace the Swan River trust Act with the aim of improving coordination and management of the river systems to improve the riverine environment, river health and amenity.

The Act was developed in response to concerns about the lack of planning management framework along the swan and Canning Rivers and aimed to provide a strategic direction.

Porter (2002) outlined a number of reasons for the ongoing failure to adequately mange this middle and Upper reaches of the Swan River; foremost was lack of funding and secondly a failure to use up to date hydrological engineering methods to determine appropriate management strategies. He argued that different management strategies were require upstream in the land areas that were not on sand formations. Porter challenged the premise of the early studies and Acts that sought full public ownership and access to all Swan River foreshores as an ideal to protect the land, he pointed out the worst areas of degradation occurred on poorly resourced public land. (2002) A number of resident groups have also been actively engaged in rallying state and local governments to conserve and rehabilitate the river foreshores in the mid reaches of the Swan River, (Bassendean Foreshore Preservation Group, Guildford Association Inc, FROGS and the Viveash Ratepayers Association) Such groups have argued for environmental considerations being given equal or greater weightings to development considerations in the planning process on sensitive foreshore land.

7. Local Bio Diversity Strategy- City of Swan (2005)

The City of Swan's Local Bio Diversity Strategy of 2005 espoused many ideals for balancing recreation, land use and amenity, with conservation and bio diversity principles. Community groups are today challenging whether the principles of flora and fauna diversity as set out in the Bio Diversity Strategy are achieving the ideals set out by the City and state Government agencies.

8. Swan and Helena River Management Framework (2007)

In 2007 The Eastern Metropolitan Regional Council commissioned a report to develop a management framework for the Swan and Helena Rivers. This report started with the 3 premises :

1. Redevelopment would occur on the foreshore,

2. Public access to all the foreshore was a right and

3. There is a need to upgrade facilities (signs toilets bike trails) on the foreshore.

Environmental issues appeared to be a secondary focus.

9. Swan and Helena Rivers Management Framework –Heritage Audit(2009)

This audit of heritage and landscape components was developed for the Eastern Metropolitan Regional Council (EMRC), it noted that remnant vegetation was under pressure from development and climate change. It acknowledged conflicts would arise between the aesthetic planning and development and natural bushland, noting the latter should take precedence (2009 p28). The report made statements about the need to direct proposed walkways around bushland on the landside, not foreshore and improve links for bushland sites.

'In all cases, this makes the conservation and protection of remnant bushland along foreshores of the Swan and Helena Rivers essential.' (2009)

10. Swan and Helena Rivers Regional Recreational Path – Development Plans (2009)

This is essentially a planning document. It was released at the same time as the former, this plan appears to have little overlap with the conservation principles identified in the Heritage Audit, noting that the principle aim was to complete the network of riverside paths in as short a time as possible (2009 p30)The plan makes reference to conservation and biodiversity principles then establishes a direction for paths and boardwalks along the foreshores and through wetlands. Where wetlands cannot be avoided, it recommends that the path proceed through the wetland with boardwalks or bridges. The study recommends the use of hiking/ bush trails for bike paths and ignores the legitimacy of other forms of recreation. Where sensitive banks are involved and erosion and bank fragility is noted, they recommend a floating board walk rather than re routing the path.

'It is preferable to locate the new paths as close as practicable to the water's edge to maximize enjoyment of the river amenity.' (2009 p21)

The document does not assess the relevance or impacts of public access and developments upon the sensitive foreshore, rather it is a tool to determine where bike trails, signage and seating could occur. Bank erosion in Guildford has been described in terms of poor quality vegetation and topography (EMRC 2007 p45) rather than considering causative factors such as boat wash. There was no discussion or consideration of the impact of recreational facilities on native flora and fauna.

11. Contemporary issues Impacting on the Swan and Helena River Systems.

Land use changes have had considerable impact on the upper and middle catchment areas of the Swan River in recent decades. Rising salt from cleared agricultural land and inappropriate fertilizer use, has increased salinity and nutrients levels from upstream. Nutrients from housing developments are also contributing to river health decline. Algal blooms are increasing in frequency in summer months with warm temperatures and lack of shade from the bare foreshores. Industrial pollution is better regulated today than in previous years, however, increasing use of chemical sprays is now being shown to adversely affect both the flora and fauna exposed to residues. Boating, fishing and bike riding is causing further physical change to the stressed riverine areas. This is often evidenced through bank erosion, low fishing stocks, damaged habitat and planning priorities that place commercial interests over environmental considerations.

12. Guildford Community Concerns.

The Guildford Association Inc, as the long standing resident and ratepayer association for the people of Guildford, has received many concerned comments from members about the management practices on the floodplain lands surrounding the town. Most of the land is in public ownership vested in the State Government, the Local authority and some leased to private clubs. Management of the riverine areas is disjointed, with maintenance variously conducted by the local authority, the Swan River Trust and the Department of Planning and Infrastructure. Current practises of spraying to wetland areas and foreshores has resulted in discussion about loss of flora, habitat and Wildlife. Removal of tree logs, limbs and dying trees to ease mowing and management has also caused concern and reported loss of certain wildlife. The Association has documented its concerns to the Local and State government departments (Guildford Association Inc 2008)

This review of literature shows a developing awareness of environmental river issues since 1955. The sensitivity of the river foreshore areas has frequently been subjugated to more concrete planning and development concerns. There appears to be paucity of information about the impact on flora and fauna in the Guildford area, with information being primarily anecdotal. There is a need to document changes to flora and fauna and existing colonies or presence of native wildlife and vegetation.

References

Brundtland ,G., *Our Common Futur.e* report for the United Nations World Commission on Environment and Development, 1987.

Bush Fires Act. Western Australian Government. 1954.

Environmental Protection Authority, *The Darling System WA Proposals for Parks and Reserves-The System 6 Study Report* for the Department of Conservation and Environment. WA. 1981.

Local Bio Diversity Strategy. City of Swan. November 2005.

Metroplan; a planning strategy for the Perth Metropolitan Region. Department of Planning & Urban Development. WA.1990.

Metropolitan Region Improvement Tax Act 41 AA, as part of The Metropolitan Region Town Planning Scheme. Government of Western Australia, 1959.

Porter, C., The Tragedy of the Swan River. 2002

Stephenson, G., and Hepburn, Plan for the Metropolitan Region, Perth and Fremantle, 1955.

Swan and Canning Rivers Precinct Planning Project. Government of Western Australia. 2004.

Swan and Canning Rivers Management Act. Government of Western Australian. 2006.

Swan and Helena River Management Framework Report. Prepared for the Eastern Metropolitan Regional Council. 2007.

Swan River Trust Act. Government of West Australian, 1988.

Taylor, R., and Burrell, W. Perth's Eastern Corridor . Prepared for the MRPA, 1978.

Taylor, R., and Burrell, W. Interim *Report Midland Sub Regional Centre* and *Eastern Corridor Stud*, prepared for the Eastern Region Steering Committee. 1977.