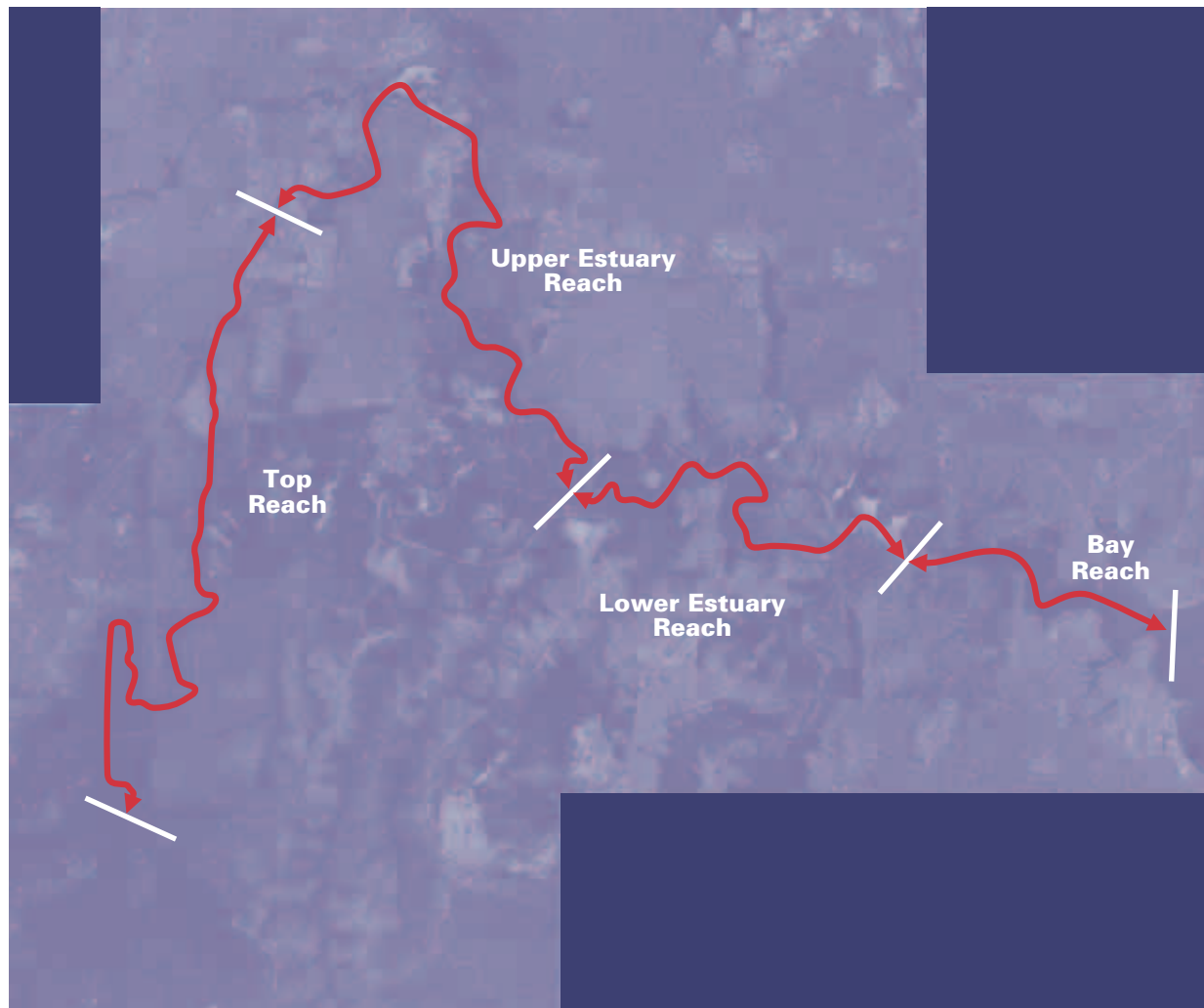


Analysis

Figure 3 Georges River Reaches



 Georges River

Planning rationale

The overview of the river and its current status outlined in the previous section provides the basis for examination of the systemic and specific issues that are the objectives of this study.

The proposed rationale, as with catchment and subcatchment planning, is to ignore cadastral or political boundaries of local and state government and work with the natural boundaries of the river system that underpin river planning and are encompassed in the Georges River Regional Environmental Plan. This process results in the organisational division of the river into four reaches:

- Bay Reach Captain Cook Bridge to Como Bridge
- Lower Estuary Reach Como Bridge to the navigable river at Sandy Point
- Upper Estuary Reach navigable river at Sandy Point to Liverpool Weir
- Top Reach Liverpool Weir to the freshwater at the origin of the river.

Creeks and tributaries will also be analysed.

Figure 3 shows the extent of the four reaches in the Georges River catchment.

The general approach to assessing scenic quality and landscape character in the analysis of existing conditions and in the subsequent recommendations will be based on a range of user experiences of the river. These include:

- the resident on the river foreshore
- the visitor to the river foreshore for recreational purposes
- the casual observer passing or crossing the river
- the river user by boat.

This experiential approach permits greater focus on outcomes that have direct correlation with community use and enjoyment of the river.

Bay Reach – Captain Cook Bridge to Como Bridge

The Bay Reach is characterised by the comparatively open water of the broad river and the numerous bays and inlets that feed it, along with the high level of urban development on the flatter terrain that extends beyond the shores near the mouth of the river.

Built environment and scenic quality

The landscape of Bay Reach is substantially modified with much of the foreshore highly developed. Extensive views of this development can be seen from the river and opposite shores.

Evidence of the natural shoreline remains and pockets of bushland have been retained on the foreshores (particularly on headlands such as Bald Face Point Reserve). The most significant factors of change to visual quality are determined by the nature of the development more than its form. Built and landscape forms often clash with the river and natural environment with some buildings breaking the ridgeline.

Large-scale developments are not in balance with the natural vegetation and the retention or loss of individual trees becomes as important as the conservation of bushland pockets. The articulation, scale and bulk of the built form are the major determinants of change in the scenic landscape.

The intensification of single lot development is a profound and clear breach of planning controls, and construction site management is often only visible from the water.

Views of the river are very limited in some parts, particularly in highly developed urban areas with limited foreshore access. Sylvania Waters is the most obvious example of this problem.

Among the extensive post-war development in this reach, features such as cultural tree plantings on ridgelines like Kangaroo Point have particular scenic significance.

The presence of marinas and moorings are also a substantial visual feature. The scale of some marinas such as at Sans Souci have significant impacts on foreshore views.

There are high levels of water-based recreation, extensive residential views, crossing views from two major elevated bridges carrying significant levels of traffic and numerous views of the river from foreshore and ridgetop parks.



Small scale boatsheds contribute to the foreshore scene.



Timber jetties and moorings contribute to the visual appeal and active use of the river.



Not only do the buildings break the ridgeline but height controls have removed the sense of a varied topography.

Foreshore access, recreation and leisure

On the southern shore, there are significant lengths of riverfront, especially along the main river channel, where there is little public access. Private land extends to the high water mark. Wherever there is sufficient water depth along the main river and in Sylvania Waters, there are many private boat facilities.

West of Tom Uglys Bridge, public access is generally available at the heads of bays, unless there are reserves providing environmental protection of mangrove and saltmarsh areas. Because of the generally steep terrain, these locations are often used for active recreation facilities. There are a few boating and sailing clubs, often co-located with other recreation areas.



Road and rail bridges play an important role, extending the community's experience of the link between the river and the bay.



Foreshore park design does not relate to the river context.

North of the river, there is more commercial activity, with cruise and fisheries wharves at Sans Souci. While there are only four formal boat ramps, they are well established with parking and facilities to serve their broader catchment.

Generally, foreshore recreation areas are larger and more accessible than those on the southern shore. They tend to have been established longer and provide a range of water- and land-related activities.



Carrs Park provides extensive regional facilities.



Como tidal baths are a historic example of the recreational use of Georges River, but the swimming pool cuts them off from the rest of the park.

Natural environment

The condition of wetlands in the Bay Reach is poor. The highly urbanised character and intensification of land uses has resulted in the discharge of pollutants and sediment which increasingly degrade the existing wetlands.

Seagrass areas have been significantly reduced due to:

- smothering by sediments from upslope erosion
- alteration of hydrology
- disposal of effluent from vessels and land (e.g. sewage overflows)
- dredging
- alteration of wave energy
- moorings and chains
- turbidity and pollutants in stormwater.

Generally mangroves and saltmarsh are located in a thin band along the foreshore. Future development on the land/water interface should be sited to minimise impacts on existing mangroves and saltmarsh.

Limited riparian vegetation exists in this reach. The minimal remnant bushland vegetation is in poor condition.

Urban development can result in polluted run-off from roads and private properties, increased sedimentation, and industrial discharge.

Water quality in this section of the river is influenced by the natural process of tidal flushing that is important as it can reduce the impact of pollutants. Current water quality conditions are moderate.



Weed invasion of the river foreshore detracts from the environmental and visual appeal.

Bay Reach: site analysis

Built environment and scenic quality

- The high arc of the Captain Cook Bridge is visually dominant in an otherwise low-lying landscape. High level of scenic accessibility of Georges River and Botany Bay. (1)
- Canal estate visually uncharacteristic in Sydney context. Little or no visibility from adjoining public roads. (2)
- Strong presence of parks on the foreshore. Swimming enclosures and beaches are particularly strong visual elements evocative of the long-established recreational uses of the river. (3)
- Georges River Bridge marks clear scenic junction of wide low-lying bay to steeper/narrow topography of river. (4)
- Views from edge of bay contained by steep topography. (5)
- Strong visual nexus between bushland on Bald Face Point and Kangaroo Point. (6)
- Enclosed bay mangroves limit views to and from shore. (7)
- Heritage character of railway bridge conveys sense of established landscape and historic setting for Como. (8)

Foreshore access

- The level of accessibility to public facilities along the foreshore is generally high.
- Low levels of access occur at Taren Point Reserve, Holt Road, the playing fields, Oyster Bay Oval, and Poulton Park, Hurstville Grove.
- Further access opportunities are of a local nature.
- Opportunity to enhance access by providing localised links to the Great Southern Walk and Georges River Trails.

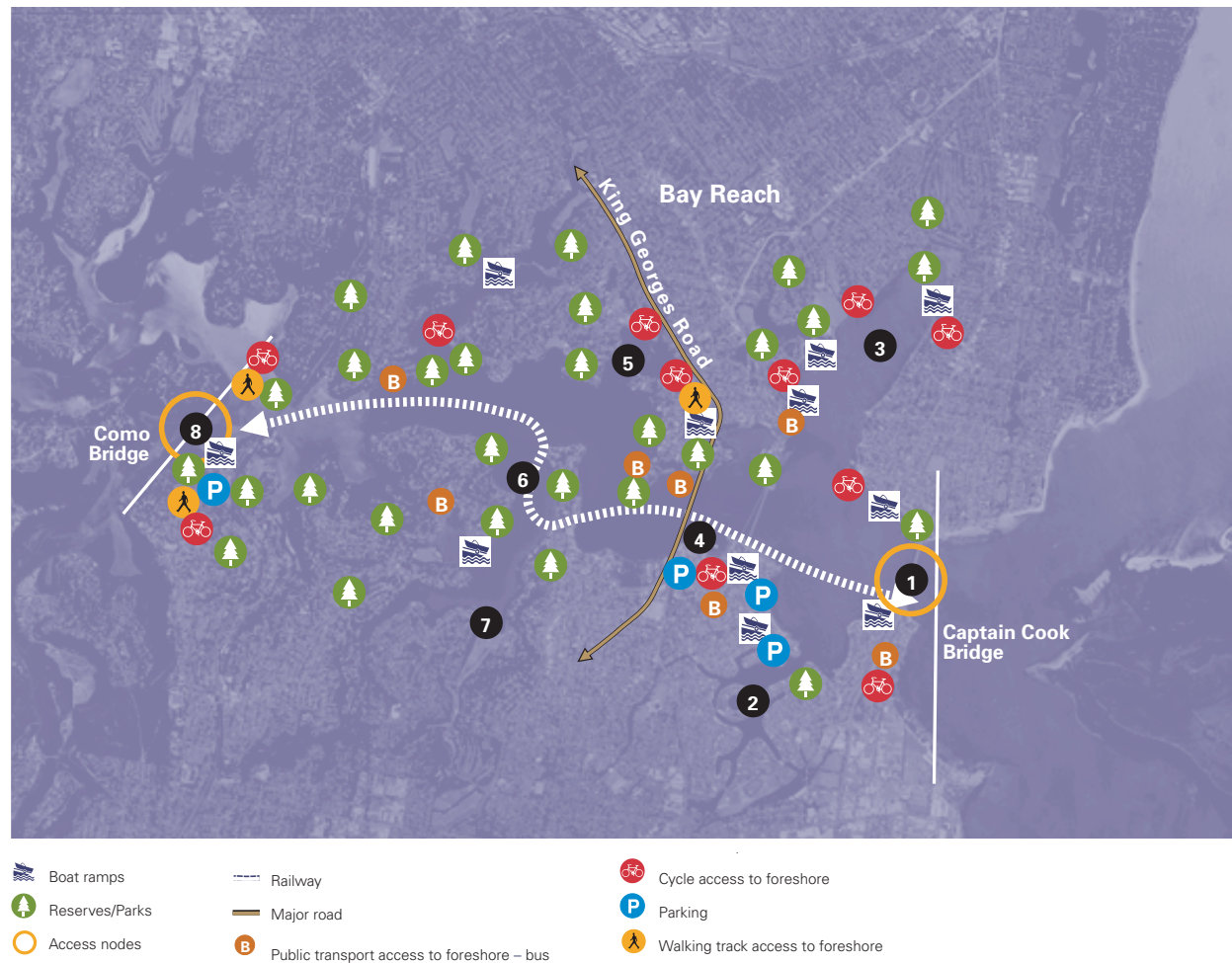
Recreation and leisure

- There are 35 foreshore parks and reserves.
- An extensive range of diverse recreational and leisure facilities exist including walking tracks, cycle paths, swimming pools, picnic and BBQ areas, boat launches, fishing areas, sailing clubs, river baths and Scouts facilities. Carrs Bush Park is the major provider of facilities.

Natural environment

- The natural environmental condition of this reach has been progressively degraded with the intensification of development.

Figure 4 Bay Reach – site analysis



Conclusions

The Bay Reach contains the most established and urbanised landscape along the river. The wide waterbody and the numerous bays and headlands nonetheless maintain significant scenic and environmental values. Scenic absorption capacity is relatively high in this reach simply by virtue of the degree by which the landscape is already modified. The result of this situation is that the progressive change of the landscape is occurring in a manner that is less readily observable on a lot-by-lot basis.

The primary focus in this reach in relation to foreshore access must be the conservation and enhancement of existing pedestrian access opportunities, particularly in headland bushland parks, at culs-de-sac and at boat ramps on the river foreshore.

Continuous foreshore path access is not a realistic goal in much of the highly developed parts of this reach and attention should be given to extending local foreshore paths where single major landholdings (such as industrial sites) provide long-term access opportunities through redevelopment. Where a limited number of residential landholdings are the only hindrance to achieving the final part or a significant local foreshore path the same process may apply.

Improved pedestrian or cycle access to the river from local neighbourhood centres, train stations and wider regional routes will rely on connections and signage that link quiet streets and local parks.

Improved public infrastructure and promotion of river tours may facilitate greater use of this reach.

Views of the river for the public is a critical issue in this reach given the extent of private foreshore ownership. Aside from ensuring that views from elevated road bridges are maximised, views to the bays and river must be maintained from public roads. The canal estate at Sylvania Waters should be seen as an example of a negative outcome for the wider community with regard to views of the river. By the same token it will be important to ensure that progressive re-establishment of mangroves (such as in Oyster Bay) do not totally preclude visual access to the river. All of this suggests the need for defining critical views in the relevant planning instruments to ensure that these are recorded and integrated in the approval processes.

Built form controls in this reach are problematic. Where they exist at present within council DCPs, there is little evidence to suggest that they have achieved their intended outcomes, as some of the accompanying photos graphically illustrate. Aside from the often poor quality of architecture in much of this reach, the most profound effect on the scenic amenity and environmental values of the foreshore arises from the progressive intensification of built form.

The most noticeable affect of this process is the substantive loss of vegetation brought about by ridge-to-shoreline development, with many gardens retaining few significant trees. Such trees are often in poor condition due to extensive root disturbance and few gardens contain any replacement planting of native canopy species.

As many of these properties are on steep land facing the water the ability of the council or other controlling agencies to observe such change depends on regular monitoring from the water. Breaches of construction regulations with impacts on water quality are also most observable from this perspective.

Where higher levels of retained vegetation exist in residential areas such as on parts of the headland of Oyster Bay, there is a need to conserve that vegetation through planning controls that focus more on the landscape elements than on the character of built form. Built form footprint (including paths, walls and drives) and height controls will have a more profound effect on scenic amenity, vegetation retention and environmental values than will bulk or building character controls.

In such situations, open-ended performance-based controls are unlikely to be as successful in maintaining scenic and environmental values as will more draconian zoning controls. The price of the latter in this, as in other reaches of the river, will be the political will and acceptance of a financial cost to achieve that goal.