

APPENDIX 1 DATA COMPILATION SUMMARY TABLE

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
1	A proposal for the establishment of a Towra Point Nature Reserve	Ecology	Botany Bay	1982	NPWS	Good	N/A	Summary of the study area including the geomorphology, vegetation, wildlife and significance of Towra Point Area. Recommendation to preserve this area for conservation. Other recommendations: <ul style="list-style-type: none"> - Unrestricted exploitation and infilling of mangrove areas should be stopped - Conservation of mangrove should be established - Ecological studies should precede any development in mangrove areas - Long term investigation should be initiated 	Even though this document is over 20 years old it is good background information for the area.	DECC Library Hurstville
2	A Report on the Uses, Changes and Prospects of the Georges River	Ecology Land use	Overall Georges	1970s	Bankstown City Council	Good	N/A	This report attempts to highlight the developing gap between the demands placed on the river and the capacity of the river to fulfill those demands It identifies current uses and issues and the environmental changes that are occurring , with final prospects and conclusion being drawn from the previous 2 sections.	None	Hurstville Council
3	An Assessment of the Health of the Georges River	Ecology Water Quality	Overall Georges	1999	GRCCC	Good	Analysis of key water quality variables	Summary of changes in water quality within the Georges River between 1950s and 1990s Description of the possible pollution causes and suggestion of possible solution Average flushing time of 10 days at Lugarno and up to 50 days in the upper reaches	Need of additional water quality data and research Need of update mapping of vegetation	DECC Library Goulburn St
4	An Environmental Assessment of Oatley Bay	Environmental Assessment	Lower Georges	1999	Kogarah Council	Good	Report done as part of Bachelor of Advanced Science Degree – included analysis of sediment, geochemicals, benthic foraminiferal and statistical analysis.	The aims of the study at Oatley Bay were to investigate the distribution of recent sediments and their characteristics, distribution of heavy metals and determine their toxicity, benthic foraminifera and identify point or diffuse source of pollution. This study recommended that the management of Oatley Bay and its catchment required review to determine how to protect the physical environment from pollution, containment of the landfill under Poulton Park and controls on building sites.	None	Kogarah Council
5	An Investigation of Management Options for Towra Point	Overall Description	Botany Bay	1977	Australian Littoral Society	Good	Measure of the location of the vegetation line Inspection and sampling of vegetation Study of heavy metals pesticides and hydrocarbons	Topography, geomorphology and geology Evolution in sand dune system and influence of the 1974 storms on erosion Climate analysis Flora and fauna description and vegetation mapping Air and water quality Land use (Oyster farming, fishing, research, education and recreation) History and impact of human being and of the different activities Ten different options of management of Towra Point	Age of the report	DECC Library Hurstville
6	Analysis of Long Term Georges River Water Quality Data 1969 – 1990	Water Quality	Overall Georges	1992	AWT	Good	Determination of long-term trends in Water Quality by examining 20 years of data Water quality parameters investigated are TP, TN, oxidized N, total uncombined ammonia, chlorophyll a, and faecal coliforms	Before dry weather effluent diversion (1985), main source of nutrients to upper estuarine sections were from Glenfield STP, whereas post 1985, diffuse sources of pollution from intensified urban areas were most important Mean nutrient levels are lower in lower estuary due to greater extent of tidal flushing	None	DECC Library Wollongong
7	Analysis of Water Quality in Kogarah Bay - thesis	Water Quality	Lower Georges	2008	Kogarah, UWS	Medium	Water sampling and analysis along Kogarah Council coastline from Oatley Bay to Kogarah Bay	Rainfall characteristics Water quality analysis along Kogarah Council Coastline and results of several water quality sampling are illustrated on graphs There is a need of more devices such as GPT, restoration of vegetation, stormwater management and more water quality sampling after rainfall events	Some tests are incomplete	Kogarah Council
8	Aquatic Biodiversity of the Georges River Catchment	Ecology	Overall Georges	2004	DIPNR	High	Aquatic survey	This report includes a number of recommendations for the management of the Georges River its vegetation , estuarine and freshwater fish species. General recommendations include to	None	GRCCC

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								identify areas of the catchment where increase in population may impact negatively on riparian and aquatic ecosystems, assess the potential impacts of increasing population pressure on riparian and aquatic ecosystems and a data management and acquisition strategy needs to be developed for the aquatic resources of the Georges River.		
9	Benthos Sampling Report	Ecology	Lower Georges	2006	Kogarah, GHD	Good	Benthic sampling to assess the potential impacts of contaminants associated with stormwater runoff and leachate from the Moore Reserve on the benthic sediment and associated fauna in Oatley Bay.	Sampling was undertaken at surrounding Bays including Oyster, Connells, Neverfail and Kyle Bays. The faunal assemblages across the Bays are similar with low levels of abundance and diversity of families. Recommendations include to continue to use Connells Bay as a reference site, Oyster Bay could stay as a sediment site and to explore the previous land uses associated with Oyster Bay to determine the causes of elevated metals. Ongoing monitoring is also recommended.		Kogarah Council
10	Beverley Park Overland Flow Study	Flood	Lower Georges	2004	Lawson & Treloar	Good	Flood modelling	Study of Beverley Park for PMF, 100, 50, 20 and 5 year flood events Maps of flood extent, depth and hazard zone	Localised study area	DECC Library Parramatta
11	Biodiveristy Strategy - different summary version (Bankstown LGA)	Ecology	Upper Georges	???	Bankstown City Council	Medium	N/A	Overview of Bankstown City Council's Biodiversity Strategy Mapping of endangered species and vegetation within the LGA	Document is a brochure	Bankstown City Council
12	Biodiveristy Strategy (Bankstown LGA)	Ecology	Upper Georges	2002	Bankstown City Council	Good	N/A	Briefly describes the biodiversity (flora and fauna- native and introduced) of Bankstown LGA Review of issues associated with biodiversity Summaries different strategies associated with this Biodiversity Strategy Lists vegetation communities in the LGA and areas in good condition Identifies 9 potential wildlife/habitat corridors in the LGA including the foreshore of Georges R, Salt Pan Creek and Little Salt Pan creek all identified as Core corridors.	None	Bankstown City Council
13	Biodiversity of the Georges River Catchment	Ecology	Overall Georges	2004	DIPNR	Good	N/A	Discussion on biological diversity and the existing biodiversity management framework. This report is one of three. The other two parts of the report are surveys of the aquatic and terrestrial biodiversity of the Georges River. This report discusses the study area, the background to the studies and the aims. The information in the aquatic and terrestrial study can be used to develop a regional planning framework to manage biodiversity at a regional scale, to inform local strategic planning and to inform site-based planning.	None	http://www.planning.nsw.gov.au/PlansforAction/CatchmentsandWaterways/GeorgesRiverCatchment/Terrestrialbiodiversity/tabid/227/Default.aspx
14	Biodiversity Strategy: Liverpool City Council	Ecology	Upper Georges	2003	Eco Logical	Good	Biodiversity strategy	One of the land and water management strategies given a high priority was to develop an incentives scheme to assist and encourage land managers to implement ecologically sustainable practices for the conservation of biodiversity.	None – very thorough document	http://www.liverpool.nsw.gov.au/biodiversitystrategy.htm
15	Botany Bay and Georges River Basin Environmental Study – Background Report	Ecology / Water Quality / hydrodynamic / Flood	Overall Georges	1973	Minister of Environment Control	Good	N/A	Detailed description of the environment of the whole Georges River Catchment including the morphology, geology, type of rock, topography, tidal range and velocities, depths, wave heights, waves directions in Botany Bay, rainfall and run-off, flood information, water quality, climate data, natural environment including vegetation, animals and their habitats. Human impacts including sand extraction and the effect on Georges River and environmental degradation.	None	DECC Library Hurstville
16	Botany Bay Bearded Greenhood Recovery Plan	Ecology	Botany Bay	2001	NSW NPWS	Good	Recovery Plan	Describes current knowledge of the Botany Bay Bearded Greenhood, reports on the research and management actions carried out to date, and identifies the actions needed and parties responsible to ensure the ongoing viability of this species in the wild. Three broad actions are developed to conserve this species including habitat and threat management, survey and research and <i>ex situ</i> conservation.	None	DECC Library Hurstville
17	Botany Bay Control and Development	Management	Botany Bay	1957	Special Committee	Poor	N/A	Wharfage and Trade in Botany Bay	Age of the report Minute of a committee	DECC Library Parramatta
18	Botany Bay Environmental Control Study: Phase 1 - Recreation	Water Quality Pollution Foreshore	Botany Bay	1976	SPCC	Good	N/A	Percentage of foreshore open space for each LGA Geology, hydrology and drainage	Age of the report	DECC Library Goulburn St

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								Embankment slope Two miles of vegetation removed between Padstow and East Hills Foreshore recreation increases erosion and runoff and sewage decrease water quality leading to closing of tidal swimming pools and algae growth Erosion at Towra Point and upstream of Bankstown		
19	Botany Bay Environmental Management Plan – Stage 1	Management	Botany Bay	1992	Federal Airport Corporation	Good	Management Plan	Management of the preconstruction and construction activities due to the Third Runway Construction Coastal Hydrodynamics issues (Management of the shoreline stability) Marine ecology issues (management of impacts on water quality, seagrass, fish, tidal and subtidal invertebrates) Terrestrial ecology issues (management of impacts on Saltmarsh and avifaunal habitats)	None	DECC Library Hurstville
20	Botany Bay Environmental Values – Background Paper	Management Social	Botany Bay	2007	BBCCI	Medium	N/A	Description of the State and Commonwealth water quality objectives and environmental value	None	http://sydney.cma.nsw.gov.au/bbcci/publications/BBCCI_Env_Values_Background_Paper_RevC.pdf
21	Botany Bay Integrated Conceptual Understanding of Environmental Patterns	Overall Description	Botany Bay	2003	WBM	Good	N/A	Sedimentation and morphology of Botany Bay Hydrodynamics and morphological processes Geological evolution Effect of works in the bay Understanding of contemporary morphology Summary and management implications Good sediment, vegetation and acid sulphates soils mapping	None	DECC Library Parramatta
22	Botany Bay Project Working paper no.4 - Natural Water Quality	Water Quality	Botany Bay	1978	Merike Johnson	Medium	Rainwater analysis Analysis of Lady Robinsons Beach sediments composition	History of the Sydney area and geological formation of the Botany Bay Catchment Climate description Lady Robinsons Beach is predominated by shells Woolooware influenced by presence of sewerage pipes after heavy rainfall Description of the main human impact on water quality	Age of the report	DECC Library Goulburn St
23	Botany Bay's Sea-grass Meadows – An ecological Overview	Ecology Erosion Pollution	Botany Bay	1986	Illert Marine Research & Publishing	Good	Ecological overview	Description of the different type of vegetation and seagrass. Impact of Botany Bay entrance dredging on the seagrass and erosion within Botany Bay and at Towra Point. Origin of seagrass recession (urchin, change in wave climate, wind-blown sand). Impact of sewage discharge on Botany Bay. Possible solution to the bare sand areas issue.	None	DECC Library Hurstville
24	Bottom Sediments of Botany Bay – Environmental Control Study of Botany Bay	Sediments	Overall Georges	1978	SPCC	Good	Sediment sampling	Detailed description of the sediment composition within Botany Bay and Georges River Upper reaches erode and deposition occurs in lower reaches	Age of the report	DECC Library Goulburn St
25	Bushland Plan of Management - Reserves in the Vicinity of Salt Pan Creek	Ecology	Upper Georges	2005	Bankstown City Council	Good	Plan of Management	Includes Alma Reserve, Cutting Reserve, Salt Pan Reserve, Stuart Street Reserve and vegetation along the Salt Pan Creek Waterway. Undertaken in response to community concerns about the loss of environmental quality within reserves and shows Councils intentions to manage parts of Salt Pan Reserve not owned by Bankstown City Council. There are eight key aims and objectives, these include to manage the reserves for conservation of their natural heritage values, management to be in accordance with the	None	Bankstown City Council

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								relevant recovery plans and threat abatement plans prepared by DECC under the <i>Threatened Species Conservation Act 1995</i> and to research and monitor the bushland reserves.		
26	Cabramatta Creek Assessment	Sediment	Upper Georges	2008	EarthTech	Good	N/A	<p>Historic assessment of Cabramatta Creek</p> <p>Description of the channel type, sediment characteristic for each reach of the river</p> <p>Ecological assessment is detailed with the description of the vegetation, habitat, disturbance social values, existing work and the improvement opportunities for each reach of the Creek</p> <p>Geomorphic and ecological actions to undertake are listed with an estimation of the timescale, the priority, the type of work needed and the outcome of each action</p>	Some part of the study area of this report is beyond the scope of the current report	Fairfield City Council
27	Cabramatta Creek Floodplain Management Study	Flood	Upper Georges	1998	WRL	Good	RMA-2 hydraulic model of the entire Cabramatta Creek catchment area	<p>Proposed new conditions for Cabramatta Creek were bridge waterway excavation works underneath Elizabeth Drive crossing of the Creek, the construction of a meander cut-off approximately 500m downstream of Elizabeth Drive in Joe Broad Memorial Park, the construction of a new levee embankment upstream of Elizabeth Drive adjacent to Blamfield Oval, the possible raising of the existing levee between Cabramatta Creek and the Tresalam Street residences and the clearing of the channel upstream of Elizabeth Drive</p> <p>These conditions results in a decrease in peak water surface elevations within the reach. Most significant reduction is due to the increased conveyance at Elizabeth Bridge</p>	An important part of the study area of this report is out of the scope of the current report	Fairfield City Council
28	Cabramatta Flying-Fox Reserve Plan of Management	Ecology	Upper Georges	1996	Fairfield City Council	Good	Plan of Management	<p>Specific objectives for the management of Grey-headed Flying-foxes Include:</p> <ul style="list-style-type: none"> - Protect colony by preventing disturbance - Conserve the structure of the native vegetation to maintain roosting opportunities - Rehabilitate and restore the bushland in the reserve without disturbing colony - Provide education material and educate reserve users and neighbours - Encourage and control appropriate scientific research relating to management of this species - Undertake management programs in partnership with the wider community 	None	Fairfield City Council
29	Cat and Fox control at Towra Point Nature Reserve, Botany Bay National Park	Ecology	Botany Bay	1992	Ashok Rathore NPWS	Good	<p>A study was undertaken of the feral fox and cat population at Towra Point Nature Reserve to design and evaluate management strategies, to reduce and possibly eliminate these species and to increase awareness and a co-ordinated approach to pest management.</p> <p>This study investigated the movement of foxes and cats, their acceptance of two types of baits, their acceptance of two methods of placement (buried in ground or suspended in the air) and their attractiveness to three different lures.</p>	<p>A key finding was that both chicken heads and chicken mince sausages were equally acceptable to foxes and feral cats. Foxes were found to not accept baits that were either buried in raised mounds or suspended in the air. The use of a lure increased the likelihood of a bait being found, with fish oil having the greatest effect.</p>	This report is a good snap shot of the fox and cat control program during autumn of 1991 which would have helped to inform management strategies for these species.	DECC Library Hurstville
30	Channel changes and the effects of sand dredging in the Georges River between Liverpool Weir and Salt Pan Creek, 1959-1973	foreshore	Upper Georges	1974	PWD/University of Sydney	Good	Cross Section Study	<p>Changes in width, maximum and mean depths, area and volume capacity were mapped between 1959 and 1973 and from Liverpool Weir to Salt Pan Creek</p> <p>Description of the soils</p> <p>Determination of the zones of accretion and erosion</p> <p>Recommendations to reduce deterioration of the river</p>	Age of the report	DECC Library Goulburn St
31	Channel changes in the Georges River between 1959 and 1973/1976 and their implications	Water Quality / foreshore	Overall Georges	1978	Bankstown Municipal council	Good	Cross Section Study	<p>Changes in Georges River geometry (depth, width, area, volume and erosion/accretion) between Gertrude Point and Tom Ugly's Bridge, as well as at Prospect Creek, Salt Pan Creek, Oatley Bay and Woronora River between 1959 and 1976</p>	Age of the report	DECC Library Goulburn St

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
								Salinity and turbidity study Comparison of the geometry and the erosion/accretion between shale and sandstone environment as well as between dredged and undredged areas Changes in channel capacity, tidal prism and flushing time along the Georges River and their impact on turbidity and salinity.		
32	Channel Changes in the Georges River between Picnic Point and Lugarno, 1959-1974 and related studies	Foreshore	Lower Georges	1976	Warner & Pickup	Good	Cross-section study	Changes in width, depths and area between 1959 and 1974 Maps of the changes and of the dredging upstream of Little Salt Pan Creek	Age of the report	DECC Library Parramatta
33	Channel Deterioration in the Georges River between Liverpool Weir and Little Salt Pan Creek	geomorphogy	Upper Georges	1973	Warner & Pickup	Good	Cross-section survey comparison between 1959 and 1972	Geomorphology of the upper Georges River estuary between Liverpool and Little Salt Pan Creek Summary of the physical background of the estuary including geomorphological setting and accumulation of sand in late geological time Determination of the impact of dredging Depth, width, width-depth ratios and sediment grain sizes were compared at various cross sections along the river between 1959 and 1972	Age of the report	DECC Library Goulburn St
34	Chipping Norton Flood Plain Mapping - Hydraulic Investigation	Flood	Upper Georges	1982	PWD/MHL	Good	Distorted scale hydraulic model of the whole lake scheme Undistorted scale hydraulic model of the section of the lake near Long Island	Rating curves for head losses in the Coot Island and Long Island constrictions Rating curve for overbank flow behind the Wildlife Island Post-lake gradients for selected stage/discharge combinations Overbank flow velocities in floodway	Age of the report Study of Chipping Norton Lake only	DECC Library Wollongong
35	Chipping Norton Lake and Moore Lake Extention Cost Estimate	Economy	Upper Georges	1983	DPWS	Poor	N/A	Solution to reduce the cost estimated previously for Chipping Norton and Moore Lakes extension Map of sand reserves in Chipping Norton	Age of the report	DECC Library Wollongong
36	Chipping Norton Lake Authority - Extraction of Materials at Chipping Norton	Out of Scope	Upper Georges	1992	Willing & Partners Consulting Pty Ltd	Poor	N/A	Maps of the location of possible future sand extraction	Notice for Tenderer	DECC Library Wollongong
37	Chipping Norton Lake Authority Act 1977 No 38	Legal Management	Upper Georges	1993	Government Information Service	Poor	N/A	Description of the Chipping Norton Lake Authority acts, constitution and power Vesting, acquisition and disposal of land	None	DECC Library Wollongong
38	Chipping Norton Lake Authority Condition Assessment of Jetties and Wharves	Design	Upper Georges	2001	Connell Wagner	Medium	Condition assessment of the jetty, wharf and platform located along the Chipping Norton Lake coastline	Estimate of remaining service life of each structure Maintenance needs were prioritized and the price were estimated Suggestion of replacement method	None	DECC Library Wollongong
39	Chipping Norton Lake Authority Liverpool Weir Feasibility Study for Remedial Works	Design	Upper Georges	1999	DPWS	Good	Assessment of historic and current Liverpool Weir conditions	Weir in poor condition Proposition of remediation work were illustrated Impact of fishway on weir hydraulics	None	DECC Library Wollongong
40	Chipping Norton Lake Bush Regeneration Project - Progress Report	Bush regeneration Weeds	Upper Georges	1994	Urban Bushland Management Pty Ltd	Good	Report on progress of bush regeneration from 9 session, with a total of 275 hours.	Sites include the western shores of Floyd Bay and Black Muscat Park. Recommendations to maintain areas in report including follow up weeding, to plant highly degraded areas with local stock.	None	DECC Library Wollongong
41	Chipping Norton Lake Planning Study	Planning	Upper Georges	1978	Cox & Corkhill Pty Ltd	Poor	N/A	Population evolution around chipping Norton Lake Description of land use, historical sites, climate, proposed layout and planning proposal for the lake area	Age of the report	DECC Library Wollongong
42	Chipping Norton Lake Planning Study - Study Area Number 1	Planning	Upper Georges	1978	Cox & Corkhill Pty Ltd	Poor	Masterplan Field observations	Foreshore management with advice on bank design with illustration of bank protection, shaping and vegetation planting	Age of the report Georges Hall Bay filled since the study	DECC Library Parramatta
43	Chipping Norton Lake Planning Study - Study Area Number 2	Planning	Upper Georges	1980	Cox & Corkhill Pty Ltd	Poor	Masterplan Field observations	Foreshore management with advice on bank design with illustration of bank protection, shaping and vegetation planting	Age of the report	DECC Library Wollongong

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
44	Chipping Norton Lake Planning Study - Study Area Number 3	Planning	Upper Georges	1980	Cox & Corkhill Pty Ltd	Poor	Masterplan Field observations	Foreshore management with advice on bank design with illustration of bank protection, shaping and vegetation planting	Age of the report	DECC Library Wollongong
45	Chipping Norton Lake Reserves Plan of Management		Upper Georges	2001	Liverpool City Council	Good	Plan of Management	Masterplans for Ascot Point and Lakes Reserve. Permitted uses include pleasure cruises and fishing, however eating of the fish caught in the Lake is not recommended. Camping, jet skis and water skis are prohibited. Recommendation to protect riparian vegetation, retain erosion control measures, to control areas of erosion, undertake proactive maintenance, encourage and promote use of the reserves for environmental education purposes.	None	DECC Library Wollongong
46	Chipping Norton Lake Scheme - Bed Stability Investigation	Sediment	Upper Georges	1983	PWD/MHL	Poor	Site observation and echo soundings Core sampling and suspended sediment analysis	Silt has settled in Hollywood Sands lease ponds and a clayey silt layer of between 0.2 and 2.5m covered the existing bed Water sampled will be taken weekly after study	Age of the report Ponds does not exist anymore	DECC Library Wollongong
47	Chipping Norton Lake Scheme - Heron Park - Assessment of Proposed Beach Alignment	Sediment Foreshore	Upper Georges	1996	PBP	Good	Dry sieve sampling	Description of tidal processes (flow, level and velocities) Flood data and sediment transport Foreshore analysis Comparison of different beach alignment option for Heron Park Beach should be monitored and Dhurawal Bay should not be dredged	Localised area	DECC Library Wollongong
48	Chipping Norton Lake Scheme - Howard Park Site	Ecology	Upper Georges	N/A	CSA	Poor	N/A	Brief description of vegetation, wasteland, outer perimeter zones and weeds in the area	None	DECC Library Wollongong
49	Chipping Norton Lake Scheme - Removal of Lake Island - Hydraulic Investigation	Hydrodynamics	Upper Georges	1984	MHL	Medium	Physical model of Chipping Norton Lake Scheme	The removal of the following islands and one peninsular was found not to adversely affect tidal flushing of the lake system: Westlake Island, Bass Island, Island at Cutler Rd, Rowley Island, Coot Island, and Peninsula south of Coot Island. Other islands, which are vital to the lake's circulation patterns and therefore need to be protected, are as follows: Long Island, Epsom Island, Wildlife Island.	Age of the report	DECC Library Wollongong
50	Chipping Norton Lake Scheme Award for Environmental Excellence in the NSW	Presentation	Upper Georges	1991	DPWS	Poor	N/A	Description of the Chipping Norton Scheme and its benefits	None	DECC Library Wollongong
51	Chipping Norton Lake Scheme Cherrybrook Park, Strong Park and Coot Island Bank Restoration - Concept Report	Foreshore	Upper Georges	1995	PWD	Medium- Good	Photogrammetric analysis between 1976 and 1989	Bank erosion rates of around 0.20.3m/yr Best option for Cherrybrook and Strong Parks and Coot Island foreshore protection is maintaining actual vegetation above high water mark and rock armouring below the mark and design of bank Design wave of 0.4m Reduction of 0.7m of flood level for a 1% AEP flood event at Cabramatta Creek since the construction of the lake Wind current velocity of around 0.1m/s	None	DECC Library Parramatta
52	Chipping Norton Lake Scheme Evaluation of Methods and Economics of Final Extraction	Economy	Upper Georges	1978	Soros Longworth & McKenzie	Poor	N/A	Description of the price of sand extraction equipment and the values and potential of the extraction areas	Age of the report	DECC Library Wollongong
53	Chipping Norton Lake Scheme Hydraulic Investigation - Report 270	Hydrodynamics Sediment	Upper Georges	1980	MHL	Medium	Scaled hydraulic model Field data Hand calculations	A lake configuration is recommended that ensures adequate tidal flushing and promotes mixing of pollutants, in all areas of the lake scheme Regular monitoring of salinity and temperature is recommended Sediment in dredged ponds will slowly erode in tidal conditions Turbidity will continue due to fines transported from the upper reaches Beach can be constructed to minimize sand losses and adequate slope is provided	No solution to stratification at depth problem Age of the report	DECC Library Wollongong

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54	Chipping Norton Lake Scheme Investigation of Low Order Floods	Flood	Upper Georges	1982	DPWS	Poor	Distorted hydraulic model Comparison of pre- and post-lake configuration Undistorted hydraulic model in constriction between the lakes	Determination of flow pattern and flood gradients for 1 and 5 years return period flood events Proposed lake will reduce flood level of the order 0.5m in the upper lake and the velocity in the vicinity of the proposed wildlife island	Age of the report	DECC Library Wollongong
55	Chipping Norton Lake Scheme Planning and Development Study	Planning Recreation	Upper Georges	1980	Environment and Planning	Poor	N/A	Description of the Masterplan of the Lakes Scheme, population characteristics of the neighbouring LGA and the recreation facilities Assessment of the land use, landscape terms and existing zoning Assessment of the capacity of the scheme for both water and land based recreation Road and residential areas upgrades will be required due to the lakes scheme impact Detailed assessment of individual sites within the development area	Age of the report	DECC Library Wollongong
56	Chipping Norton Lake Scheme Present Position and Masterplan Review Draft	Management Economy	Upper Georges	1989	DPWS	Medium	N/A	Description of the history of the lake scheme and of the costs to date and expenditures for each element of the scheme Details of the outstanding works were provided Costs estimates for various option of the lake scheme and annual budget were compared	None A	DECC Library Wollongong
57	Chipping Norton Lake Scheme Redevelopment of Howard Park - Technical Assessment of Development Options	Ecology Management Planning	Upper Georges	1996	PBP	Medium	Borehole log Wetland assessment	Assessment of various option for the design of Howard Park based on the site constraints, opportunities and physical characteristics The best option is a combination of wetland, flying fox habitat and passive eco-education/recreation areas adjacent to the wetland	More studies needed once the option selected	DECC Library Wollongong
58	Chipping Norton Lake Scheme: Moorebank Lake Extension: Soil Investigation	Sediment	Upper Georges	1984	Geomechanics Laboratory - Design & Services Branch	Medium	Soils investigation at Moorebank Lake consisting of drilling, sampling, particle size measurement and soil standard penetration test	Description and composition of the sub-surface profiles at various location	Age of the report	DECC Library Wollongong
59	Chipping Norton Lakes Authority Electrodewatering Trial	Sediment	Upper Georges	1998	CSIRO	Poor	Electrodewatering	Needed further studies	Further studies are needed	DECC Library Wollongong
60	Chipping Norton Lakes Plan of Management - Fairfield City Council	Management	Upper Georges	1996	Fairfield City Council	Good	N/A	Description of soils, vegetation, fauna and current activities within the area Assessment of access, recreational opportunities and structures Management option, policy implementation and performance were detailed and prioritized Detailed list of the different type of flora and fauna is given	None	DECC Library Wollongong
61	Coastal Resource Atlas for Oil Spills in Botany Bay	Pollutant	Botany Bay	1984	SPCC	Medium	N/A	Management plan to avoid considerable damage within Botany Bay and Towra Point Reserve Boomer to be ready for use and dispersant to be used as a last resort only	Age of the report	DECC Library Hurstville
62	Commercial Fisheries and Oyster Cultivation – Environmental Control Study of Botany Bay	Ecology Economy	Botany Bay	1979	SPCC	Poor	N/A	Catch and value of fishes, crustaceans and mollusks Location of Oyster farms and number of lease and areas between 1969-1978	Age of the report	DECC Library Goulburn St
63	Creating The Great Kai'mia Way	Management	Overall Georges	2003	SSEC	Good	N/A	Global description of the Great Kai'mia Way construction Recommendations and actions to be undertaken all along the catchment area as well as the key stakeholder and an estimation of the cost are provided Description of what is to be undertaken and what has already been done along the Way	None	SSEC
64	Creek Areas Plan of Management	Management	Upper Georges	1996	Fairfield City Council	Medium	N/A	Description of the physical and environmental characteristics of the different creeks located within the Fairfield City Council LGA Description of the landscape character, access and circulation, recreational opportunities and constraint Management objectives and timeframes are detailed for various issues (ecology, stormwater, water quality, fire management,	Several creeks are out of the scope of the current report	Fairfield City Council

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								research, education, tourism, etc.)		
65	Data Report Georges River Wet Weather Recovery Water Quality Sampling 11 February 1992 to 16 March 1992	Water Quality	Overall Georges	1992	AWT Science & Environment	Medium	Water Quality sampling during one month along the Georges River Collection of rainfall and effluent discharge information	Raw water quality data collection Analysis of the data illustrated on several graphs	One month of data	DECC Library Wollongong
66	Decision Support Tool for Prioritising Remediation Works in a Catchment/Estuarine Bay System	Pollution modelling	Overall Georges	2004	MHL	Good	Construction of a Decision Support Tool (DST) using MapInfo and MS ACCESS for Kogarah Bay WBNM 2002 v100 Model of Kogarah Bay RMA2 and RMA11 models of Kogarah Bay	Presentation of the DST	Database being updated	http://www.mssanz.org.au/MODSIM03/Volume_02/A10/02_McLean.pdf
67	Determining the Environmental Values of Botany Bay and its Catchments	Social	Botany Bay	2008	SMCMA (BBCCI)	Medium	Survey questionnaire regarding environmental value within the Botany Bay area	Strongest environmental values from the community relate to visual and natural amenity, recreational areas, quiet environment, aquatic and terrestrial wildlife Greatest concern pertained to pollution and threats to water quality	None	http://sydney.cma.nsw.gov.au/bbcci/publications/Final_BBCCI_Environmental_Values_Questionnaire.pdf
68	Development Options and Strategy Report Lansvale Peninsula - Chipping Norton Lake		Upper Georges	1997	Hassell	Poor	N/A	Site characteristics description (topography, land use, climate...) Potential land use for the different parks of the Lansvale peninsula Key development objectives Development options, strategies and recommendation for each park	None	DECC Library Wollongong
69	Dissolved Oxygen – Environmental Control Study of Botany Bay	Water Quality	Overall Georges	1981	SPCC	Good	Sampling and dissolved oxygen measurement	Impact of the dissolved oxygen demand on aquatic life Different water parameters measurements Causes of the dissolved oxygen (DO) concentration variations (algal bloom, storms, STW) Description of the oxygen demand variation along the estuarine part of the Georges River and the impact of storm on the levels Dredging did not impact the DO levels	Age of the report	DECC Library Goulburn St
70	Do We need a Georges River Catchment Trust? A Discussion Paper	Management	Overall Georges	1999	Bewsher Consulting	Medium	N/A	Discussion paper regarding the case for and against setting up a Georges River Catchment Management Trust Description of population, land use and administrative framework within the catchment Discusses possible models for the setup of a Georges River Trust	This discussion paper is now superseded as the work of all the Catchment Management Trusts have been taken over by the Catchment Management Authorities (Sydney Metro CMA)	DECC Library Wollongong
71	Dominance of point source in heavy metal distributions in sediments of a major Sydney estuary	Pollution	Overall Georges	1996	G. F. Birch D. Evenden M. E. Teutsch	Good	Studies the concentration and the dispersal of heavy-metal contaminants in the Georges River estuary	Point sources (waste dumps, sewage overflows, and discharge from a polluted river) elevated sediment heavy-metal concentrations up to 50 times above background in Georges River/Botany Bay estuary Nonpoint sources (stormwater, marinas, moorings and wharfs/jetties) raised baseline levels to four times background Deep holes dredged in Botany Bay for the construction of new and existing runways for Sydney Airport act as sinks for metal-rich muds and can act as a secondary source of contaminant	None	ScienceDirect
72	Dust Management Plan for the Howard Park Redevelopment Chipping Norton Lake Authority	Pollution	Upper Georges	2000	Dick Benbow & Associates Pty Ltd	Medium	Air quality legislation, measurement and assessment Dust impact modelling	Pollutant emission and dust sources assessment Description of possible control measures	None	DECC Library Wollongong
73	East Hills Bank Erosion Study - Georges River	Foreshore	Upper Georges	1990	PWD	Medium-Good	Photogrammetric analysis of the East Hills area between 1926 and 1984	Erosion mostly due to natural river migration Little effect of tide flood Channel heavily dredged during 1950s-1960s with depth which have sometimes tripled between 1926 and 1984 Study of protection option	Age of the report Erosion rate have significantly changed due to human influence between 1920s and 1980s	DECC Library Parramatta

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
74	Ecological and Human Health Risk Assessment of Chemicals in Sewage Treatment Plant Discharges to the Georges River	Pollutant / Water Quality	Overall Georges	1997	SWC	Good	Measure of chemical and non-chemical stressor concentrations	Detailed study of water, STPs and stormwater runoffs composition, undertook with several survey methods Assessment of the impact of various chemical and non-chemical pollutant on aquatic life and human health Despite the conservative approach, the risk for aquatic life and human health are very low	None	DECC Library Goulburn St
75	Ecological Assessment of Proposed rehabilitation of Tailings Pond at Howard Park Lansvale	Ecology Sand mining	Upper Georges	1998	Hunter Wetland Research and Management		Ecological input into management plan	This report describes the existing ecology of the tailings pond and reviews proposals for its rehabilitation. This report endorses the tailings pond management plan as they are determined to be compatible with maintain and enhancing the ecological integrity of the pond providing recommendations in discussion are carried out.	None	DECC Library Wollongong
76	Effect of Proposed Reclamation on Floods in Georges River - Livepool	Flood	Upper Georges	1973	WRL	Poor	Tidal model	Impact of the reclamation along Helles Road upstream of Newbridge Road Bridge on flood level and velocities	Age of the report	DECC Library Parramatta
77	Effects of Dredging on Macrobenthic Infauna of Botany Bay – Environmental Control Study of Botany Bay	Ecology	Botany Bay	1979	SPCC	Medium	Macrobenthic infauna sampling within Botany Bay	Faunistic variation associated with sediment character and hydrologic condition Dredging altered species composition and richness Stable communities re-established in dredged area within 2-4 years	Age of the report	DECC Library Goulburn St
78	EIS on Oatley Bay Scheme	EIS	Lower Georges	1973	Crooks Michell Peacock Stewart / Dames & Moore	Poor	EIS Sediment sampling	Impact of reclamation of 8 acres of mangrove at Poulton Park and dredging in Oatley Bay Tides height, sediment and hydrodynamic characteristics	Precision of the wave data Age of the report	DECC Library Parramatta
79	EIS Proposed Recycling and Processing of Construction, Demolition and Other Similar Wastes at Riverside Rd, Chipping Norton	EIS	Upper Georges	2003	Benedict Reclamation	Poor	EIS	Environmental impact of recycling and processing of construction, demolition and other similar waste is limited	Mostly inland	DECC Library Parramatta
80	Environmental Assessment of Botany Bay - Sediments, Sediment Geochemistry & Foraminifera	Sediment	Botany Bay	2008	BBCCI	Good	Study of the distribution of unconsolidated sediments to assess geochemical characteristics and to identify and define ecology of benthic foraminifera Sediment grain size characteristic measures	Maps of the grain size distribution, of the foraminifera diversity and sediments geochemical characteristics Impact of the Airport facilities, the development of Port Botany and Cooks and Georges River	Lack of previous data Investigation to be extended to the whole catchment	http://www.sydney.cma.nsw.gov.au/bbcci/publications/Final_Report_J073820%202023%20June%2008.pdf
81	Environmental Control Study of Botany Bay – Summary Report – For Discussion and Comment	Overall Description	Overall Georges	1980	SPCC	Good	N/A	Summary of the finding of all the SPCC technical report published in 1978-1979	Age of the report	DECC Library Goulburn St
82	Environmental Control Study of Botany Bay – The Ecology of Fish in Botany Bay – Biology of Commercially and Recreationally Valuable Species	Ecology	Botany Bay	1981	SPCC	Medium	Collection of fish	Description of the types of habitats in Botany Bay Detailed description of the different types of fishes in Botany Bay	Age of the report	DECC Library Goulburn St
83	Environmental Control Study of Botany Bay - water resource management plan for Botany Bay and its tributaries	Water Quality Pollution Foreshore	Overall Georges	1982	SPCC	Good	N/A	Description of the ecological value of Botany Bay and the Georges River and of the most significant environmental threats in the area Environmental recommendations (about water quality, environment conservation, vegetation, foreshore erosion, natural resources monitoring, protected aquatic areas, future developments...) in Botany Bay and Georges River Description of the hydrology and water quality of the Georges River	Age of the report	DECC Library Goulburn St
84	Environmental Quality and Control of the Georges River	Everything	Overall Georges	1984	Allan Campling	Medium	EIS	Global overview of the Georges River with river and land uses, hydrology, flora and fauna, history, urban growth and Water Quality List of environmental and governmental bodies	Overview only Age of the report	DECC Library Parramatta
85	Estuary Issues and Values Study	Ecology	Lower Georges	2000+	Kogarah Council	Good	Estuary and issues study	Study area included Kogarah, The Middle, Oatley and Neverfail Bays. Significant issues for all bays included sedimentation, water quality, ecological decline and foreshore modification. Kogarah Bay was prioritised for further studies for a number of reasons including due to being the longest and therefore prone to circulation issues and being edged by the largest number of former landfills.	None	Kogarah Council

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86	Eutrophication Study Georges River by SDL (August 1993 - March 1994) - Interpretive Report	Water Quality	Overall Georges	1995	AWT EnSight Water Board	Good	Examination of the spatial and temporal variation in nutrient concentrations and algal biomass within the Georges River	Differences in concentrations between sites reflect differences in land use, the influence of proximity to marine and freshwater sources, and proximity to pollution sources Differences in concentrations between the water column in some areas reflect the influence and interaction between fresh and marine waters Temporal variation affected by rainfall, stream flows, antecedent conditions and seasonal variations	None	DECC Library Wollongong
87	Eutrophication Study Report - Interpretive Report Georges River 01 January 1993 to 31 March 1994	Water Quality	Overall Georges	1994	Water Board	Good	Sampling using a submersible data logger	Description of the evolution of the water quality within the eight month of the observation at several location along the Georges River	Study of eight month of data only	DECC Library Wollongong
88	Evaluation of Macrophyte Beds and Constructed Wetlands in Bankstown	Ecology Stormwater	Upper Georges	2009	Bankstown City Council	Good	Baseline surveys of water quality, sediment and aquatic ecology as part of an evaluation of constructed macrophyte beds and wetlands within the Bankstown Local Government Area (LGA).	Many site specific recommendations are stated in the report however none are directly related to the Georges River but indirectly related to improve water quality, and reduce rubbish, flowing into the river at some points during high flow.	No specific management recommendations for Georges River	Bankstown Council
89	F5 Tollroad Bridge over the Georges River Geomorphological Analysis Progress Report 1	Foreshore / Flood	Upper Georges	1992	PWD	Medium	Photogrammetric analysis along the actual F5 Tollroad bridge over the Georges River	Impact of the bridge on flow with increase in flood velocities and scour during storm event Erosion rate of 0.15m/yr used for planning	Age of the report	DECC Library Parramatta
90	Faecal Coliform Studies Georges River (January 1993 - March 1994) - Interpretive Report	Water Quality	Overall Georges	1995	AWT EnSight Water Board	Medium	Sampling and faecal coliform (FC) analysis at 25 locations along the Georges River catchment every six days	Highest FC densities in Upper Reaches of the River while lowest densities are in Botany Bay FC densities are highly influenced by rainfall FC densities generally recover to below 200CFU/100mL (ANZECC guideline) within three days after a rainfall Future sampling should be more frequent, after each rainfall event and consist of at least two sampling per day	Two months of measure only	DECC Library Wollongong
91	Faecal Microorganisms in Water and Sediments of the Georges River, Sydney - Technical Report	Water Quality	Overall Georges	1993	Water Board	Medium	Study of the concentration of bacterial indicators and pathogenic organisms present in water and sediments of the Georges River, the spatial trends in the concentration of such organisms, the role of sediment as a reservoir of pathogens, the possible associated health risks, and biomarkers that might be able to distinguish sewage from stormwater contamination	During periods of dry weather low flow conditions, most faecal concentrations were low, although these were significantly increased post rainfall events – primarily due to upstream sewage overflow A reduction in the frequency and volume of sewage overflow from the Fairfield STP into Prospect Creek would significantly improve both water and sediment quality during wet weather Concentrations of faecal coliforms decreased linearly with increasing distance downstream of Prospect Creek Top sediments were more heavily polluted than bottom sediments for all microbiological variables measured	None	DECC Library Wollongong
92	Fairfield City Council Draft Strategic Plan - Aims&Policies Structure Map	Management	Upper Georges	1987	Fairfield City Council	Medium	N/A	Description of Fairfield Council strategic plan including the restriction on development, land acquisition and heritage provision	None	DECC Library Wollongong
93	Flood evacuation study - Hollywood Drive Precinct Lansvale	Flood	Upper Georges	1988	Kinhill Engineers	Good	Focus on problems that occurred in the Hollywood Drive Precinct during the 1986 flood event to improve evacuation system	Flood, flow route and ground level are mapped in the study area Problems were the access and traffic control, the sequence of evacuation and local flood warning, the regional flood warning and public education Some possible strategies are minor or major changes in flood escape route (route raising), improved order of evacuation, local and regional flood warning, creation of alternative emergency accommodation sites and public education	Localised area	Fairfield City Council
94	Flood Hazards to Developments along the Lower Georges River - Liverpool to East Hills	Flood	Upper Georges	1978	DPWS	Good	Review of previous reports	Flood plain mapping for the 20yr ARI, 50yr ARI and 100yr ARI flood event from Liverpool to East Hills and this maps should be adopted for planning purposes Qualitative assessment of the impact of developments within the floodway (limit of 1 in 20 year flood) and floodplain (limit of 1 in 100 year flood) on the flood behavior and the report should be publicized to extenc awareness on flood risks	Age of the report	DECC Library Wollongong

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95	Flood Impact Assessment of Howard Park reinstatement Options	Flood	Upper Georges	1999	Willing & Partners Consulting Pty Ltd	Good	Site inspection SMS/RMA2 Hydrodynamic floodplain model for different reinstatement option for Howard Park	Description of the various work that will be undertaken to rehabilitate Howard Park Best reinstatement option would be to lower the Turkeys Nest and surrounding areas to a level of the 3.5m AHD and to create a 60m-long beach along the foreshore directly adjacent to Rowleys Point Road. An artificial island should be created east of the existing pond Erosion causes are flow regime, loss of bank vegetation, wave action and soil pore water pressure. Erosion is likely to continue for some time as the river as a potential to erode a further 5 to 10m at Howard Park Most appropriate option is the battering of the bank and linear protection of its toe	Localised area	Fairfield City Council
96	Flood Plain Management Studies - Draft Report - Georges River Basin	Flood	Overall Georges	1981	Sinclair Knight & Partners	Good	Model of the whole Georges River	Description of rainfall, flood characteristics and damage estimation for a 20, 50 or 100 year event in different problem areas Future flood mitigation strategy assessment Maps of flood mitigation options and 100yr flood limit	Age of the report	DECC Library Parramatta
97	Flood Stage Change by Proposed Reclamation - Liverpool	Flood	Upper Georges	1969	WRC	Poor	Technical investigation	Impact of a proposal industrial development on flood levels at Georges River in Liverpool	Age of the report	DECC Library Parramatta
98	Flood Stage Change by Raising Ground Level of Residential Areas - Milperra	Flood	Upper Georges	1972	WRL	Poor	Tidal model	Impact of raising of ground level of residential areas in the vicinity of Newbridge Road on flood level for various raising heights	Age of the report	DECC Library Parramatta
99	Floods along the Georges River	Flood	Overall Georges	1993	Liverpool Local Studies	Poor	N/A	Collection of newspapers about flood along the Georges River	None	Library Liverpool
100	Floyd Bay Development Study	Overall description Management Planning	Upper Georges	1990	PWD	Poor	N/A	Description of the Chipping Norton Lakes and their history Description of the population characteristics and recreational issues Description of the physiographic, hydrodynamics, land use and tenure, flooding, and visual characteristics as well as the constraints and opportunities of Floyd Bay Development options and selection of a preferred options with design elements and description of a masterplan	None	DECC Library Wollongong
101	Fluvial Geomorphology of Sydney and its Role in Pollution Management	Pollution Water Quality	Overall Georges	2006	Robin F. Warner	Good	N/A	Georges Valley has large tidal volumes for flushing Most efficient flushing is in the lower parts of the tidal rivers because of ebb tides (twice per day) only run out for over 6 hrs Lower riverine inputs further reduce flushing as does sand dredging operations, which increase sub-tidal capacities Georges River catchment is 912km ² , of which 290 km ² is urban (32%) and 384 km ² is natural Bed and meander core exploitation at the head of the tidal river was used in Georges River. The former reduced flushing by increasing subtidal capacities, and the latter greatly increased both the upper tidal prisms as well as capacity in the top few kilometres The wider estuarine channels are subject to less water rise in floods and the lower energies allow delta forms in upstream parts and finer bed accretion downstream The impacts on urban tidal channels are such that bed accretion reduces capacities below the tidal prism and marginal sedimentation in the inter-tidal zone can reduce the volume of the flushing prism Two main forms of pollution for Georges River are stormwater and sewage overflow and their contribution to faecal coliform and nutrient concentrations is provided	None	
102	Foreshore Management Study and Plan -	Foreshore management	Lower Georges	2009	Kogarah, WMA Water	Good	Condition assessment	Condition assessment of council owned foreshore and preparation of five year maintenance program.	None	Kogarah Council

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	Kogarah									
103	Foreshore Pedestrian Link and Recreation Access - Funding Application	Design Management	Lower Georges	1992	Hurstville Council	Medium	Staged masterplan to improve recreation system and pedestrian in the natural wetland of Salt Pan Creek	Description of the Salt Pan Creek environment Illustration of the proposed development within Salt Pan Creek and description of the advantages for the environment and for the community of such developments Time chart and cost estimate of the project is described	None	Hurstville Council
104	Geomorphic Assessment of the Lower Cabramatta Creek	Geomorphic	Upper Georges	2006	Fluvial Landscapes	Medium	Aerial photos observation	Brief description of the geology, soil and topographic characteristics of the Cabramatta Creek, the channel changes and the increases in peak discharge River Style classification of the different part of Cabramatta Creek are mapped Geomorphic condition of Cabramatta Creek are generally in good condition despite human impact	Important part of the study area of this report is beyond the scope of the current report	Fairfield City Council report
105	Georges River - Chipping Norton - Sand Extraction	Management	Upper Georges	1975	DPWS	Medium	N/A	Description of the Chipping Norton Scheme Legal issues of the lake are detailed Description of the current and future sand extraction works, their volume and timescale Description of the final lake layout and its cost estimate	Age of the report	DECC Library Wollongong
106	Georges River : past and present			1993	Liverpool Local Studies	Poor	N/A	Collection of newspapers about Georges River History and main development	None	Library Liverpool
107	Georges River 1990 Water Quality Monitoring - Preliminary Report February to August	Water Quality	Overall Georges	1990	Water Board	Good	Water quality monitoring conducted for 6 months between Feb – Aug 1990 in the Georges River	The poorest water quality was found in the upper estuary section (from Picnic Point to Liverpool Weir) and in the two major tributaries to that section of the river – Prospect and Cabramatta Creeks Mean dry weather faecal coliform levels in the upper estuarine section exceeded levels for primary recreation contact, and worsened substantially in wet weather; similarly for total phosphorus. Total nitrogen was approximately double acceptable levels in the upper estuarine section (Prospect and Cabramatta Creeks), but did not markedly increase in wet weather A list of recommendations were made to continue and further more frequent, detailed and comprehensive monitoring	Poor correlation due to limited data	DECC Library Wollongong
108	Georges River and Botany Bay Symposium	Management	Overall Georges	1999	SSROC	Poor	Collection of presentations made by speaker representing local government, state agencies and corporations, scientific community and Sydney Airport	Focus was on 4 related themes – Coordinated management, Planning, Design and Development Control, Community Education and Involvement, and Catchment and Waterways Restoration Insight into the themes and direction for future management plans based on past experience and case studies locally and from abroad. Aim of this symposium was to stimulate thought and provoke suggestions to submit to the HRC for better management of the Georges River and Botany Bay System Symposium led to the formation of a 'core group' that will pursue the outcomes of the Symposium and develop partnerships and mechanisms to help coordinate the GR system	None	DECC Library Wollongong
109	Georges River Catchment - Guidelines for better practice in foreshore works	Management	Overall Georges	2004	DUAP	Good	N/A	Overall description of the Georges River Catchment (topology, geology, land use) Brief description of the catchment conditions and focus on main issues within the catchment (ecology, runoff, erosion) Guidelines for strategic planning and ecological rehabilitation are detailed List of the key legislation and supporting information	None	Fairfield City Council

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110	Georges River Catchment - Regional Environment Study - Stage 1 - River Health	Topography Water Quality Land use Recreation Management	Overall Georges	1997	DUAP	Good	N/A	Description of the geology, topography and soils in the Georges River catchment, water quality overview and sources of Water Pollution Description of the flora and fauna and of the land use and recreational use Detailed list of the authorities, committees, agencies, local government and legislation in the catchment	Stage 1 does not include issues, responses and goal, outline of regional environmental plan and strategy	DECC Library Wollongong
111	Georges River Catchment Built environment and foreshore access study	foreshore	Overall Georges	2004	DIPNR	Good	N/A	Protection, improvement or restoration of Georges River foreshore, its access and its vegetation Management of the built environment and of control along the Georges River Scenic assessment and its degree of modification Construction specification along the foreshore and maintenance recommendation for the foreshore structure Great Southern Walk project description and benefits	None	http://www.planning.nsw.gov.au/PlansforAction/CatchmentsandWaterways/GeorgesRiverCatchment/Builtenvironmentandforeshoreaccessstudy/tabid/228/Default.aspx
112	Georges River Catchment Management Committee - Strategic Plan 1994	Management	Overall Georges	1994	CMC	Medium	N/A	The strategic plan attempts to reconcile the competing forces which threaten the environment of the catchment The plan identifies and describes a range of physical and organizational issues relating to the environmental concerns in the Georges River. Corresponding actions are coordinated and listed to provide an actionable framework to sustain the Georges River An action plan is included	Only management advice	DECC Library Wollongong
113	Georges River Catchment Management Committee - Strategic Plan 1997	Management	Overall Georges	1997	CMC	Medium	N/A	Management of Water Quality, aquatic habitat, education, bushland management, awareness, environmental evaluation, waste	Only management advice	DECC Library Parramatta
114	Georges River Catchment Regional Environmental Study	Management	Overall Georges	1998	DUAP	Medium	Gathering of several management and planning documents	Maps of LGAs and catchment Shaping the Georges River Catchment Regional planning strategy Regional environmental plan	None	DECC Library Parramatta
115	Georges River Community Open Space Corridor Plan of Management (Bankstown LGA)	Management	Upper Georges	2001	Bankstown City Council	Good	N/A	Overall description of the corridor characteristics along Bankstown Council Detailed list of pressures on the Georges River Open Space Corridor and the associated opportunities Planning and management strategies along with the implementation timeframes are described	None	Bankstown City Council
116	Georges River Copy of Raw Data Sheets for Field Trip 18th-19th April 1979	Flood	Overall Georges	1978	MHL	Poor	Flood data survey	Raw flood data	No study of the data Data for two days only	DECC Library Parramatta
117	Georges River Copy of Raw Data Sheets for Field Trip 26th-28th April 1978	Flood	Overall Georges	1978	MHL	Poor	Flood data survey	Raw flood data	No study of the data Data for three days only	DECC Library Parramatta
118	Georges River Database Compilation and Assessment	Hydrodynamics Data Compilation	Overall Georges	1990	PWD	Good	Compilation of hydraulic and sedimentary processes data available on the Georges River	Preliminary interpretation of hydraulic and sedimentary processes data available on the Georges River Basis on which to develop the analysis and assessment of estuary restoration projects and to assess the effects of sand mining and the Chipping Norton Lakes Scheme on hydrodynamic and sedimentary processes of the GR	None	DECC Library Wollongong
119	Georges River Dynamics Study – Hydraulic Data Collection 4/5/77	Flood	Upper Georges	1977	PWD	Medium	Flood data survey Sediment and bed sample Cross section	Flood levels and currents Sediment data Salinity and temperature	Data for one day only	DECC Library Parramatta

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
							Photographs			
120	Georges River dynamics study : hydraulic data collection, 27.4.78	Hydrodynamics	Overall Georges	1978	PWD	Medium	Flood data survey Sediment and bed sample Cross section Photographs	Flood levels and currents Sediment data Salinity and temperature	Data for one day only	Library Liverpool
121	Georges River East Hills Line, Copy of Raw Data for Field Trip on 29th November 1978	Flood	Lower Georges	1978	MHL	Poor	Flood data survey	Raw flood data	No study of the data Data for one day only	DECC Library Parramatta
122	Georges River Fire Management Strategy	Management	Overall Georges	2009	NSW NPWS	Poor	N/A	Summary table and mapping of the fire strategy	Overview and summary only	DECC Library Hurstville
123	Georges River Flood Behaviour - Status Report	Flood	Overall Georges	1997	DLWC	Good	Review of previous reports Assessment of changes that have occurred within the catchment between 1988 and 1997	History of flooding No need to modify design flood level of the 1991 Georges River Flood Study	None	DECC Library Wollongong
124	Georges River Flood Data 21st March 1983	Flood	Overall Georges	1986	PWD/MHL	Medium	Flood level and current metering at East Hills Footbridge, Lansdowne Bridge and Mountbatten Bridge Water levels every 15 minutes at Milperra Bridge, Lansdowne Bridge, Cutler Road, Scrivener Street and Liverpool Weir Hourly rainfall data	Tidal characteristics	Data measurement for one day only	DECC Library Parramatta
125	Georges River Flood Data April 28th - May 1st 1988	Flood	Overall Georges	1989	MHL	Medium	Flood level and current metering at East Hills Footbridge, Lansdowne Bridge and Mountbatten Bridge Water levels every 15 minutes at Milperra Bridge, Lansdowne Bridge, Cutler Road, Scrivener Street and Liverpool Weir Hourly rainfall data	Tidal characteristics	Data measurement for four days only	DECC Library Parramatta
126	Georges River Flood Data August 5th-6th, 1986	Flood	Overall Georges	1987	PWD/MHL	Medium	Flood level and current metering at East Hills Footbridge, Lansdowne Bridge and Mountbatten Bridge Water levels every 15 minutes at Milperra Bridge, Lansdowne Bridge, Cutler Road, Scrivener Street and Liverpool Weir Hourly rainfall data	Tidal characteristics	Data measurement for two days only	DECC Library Parramatta
127	Georges River Flood Level Survey April 1988 Flood Event	Flood	Overall Georges	1988	PWD	Poor	Flood debris marking in several areas along the Georges River	Determination of flood levels	Approximate methodology	DECC Library Parramatta
128	Georges River Flood Levels - Liverpool Bridge Flood Data between 1963 and 1975	Flood	Upper Georges	1975	MHL	Medium	Flood level measurement at Liverpool bridge	Flood level between 1963 and 1975 at Liverpool Bridge	Age of the data	DECC Library Parramatta
129	Georges River Flood Metering 21.3.1983 Raw Data 1147	Flood	Overall Georges	1983	MHL	Poor	Flood data survey	Raw flood data	No study of the data Data for one day only	DECC Library Parramatta
130	Georges River Flood Study	Flood	Overall Georges	1991	PWD	Good	WBNN hydrologic model Hydraulic physical model	Description of the catchment characteristics and of the model construction and calibration Design flood estimate and flood contour mapping for 20, 50 and 100yr ARI flood event	None	DECC Library Wollongong
131	Georges River Floodplain Risk Management Study and Plan Vol 1 - Main Report	Flood	Overall Georges	2004	Georges River Floodplain Management Committee	Good	Verification and complement of the data of the 1991 Georges River Flood Study report containing a design flood levels from a physical model, with a MIKE-11 computer	Focus on the creation of a floodplain risk management plan to provide flood warning, emergency management measure, public awareness and planning controls for future development along the Georges River	None	http://www.liverpool.nsw.gov.au/LCC/INTERNET/timDownloadDocument.aspx?number=96615.2006

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							model of the Georges River	<p>Historical flood records</p> <p>Answer from inhabitants to the different questionnaires about flood</p> <p>Impact of recent development on the flood level</p> <p>Number of properties flooded and flood level for different events (20yr, 100yr , PMF)</p> <p>Classification of the properties in Low, Medium and High Risk areas</p> <p>Creation of a flood database including flood criteria as well as the extent and severity of damages</p> <p>Existing floodplain management measures description</p> <p>Estimation of the damages costs</p>		
132	Georges River Floodplain Risk Management Study and Plan Vol 2 - Main Report	Flood	Overall Georges	2004	Georges River Floodplain Management Committee	Medium	N/A	<p>Description of the LGA characteristic along the Georges River</p> <p>Flood planning recommendations for each Council along the Georges River</p>	None	Bankstown City Council
133	Georges River Foreshore Improvement Program - Strategic Bank Stabilisation Plan 1	Foreshore Ecology Management	Upper Georges	2003	Department of Commerce	Good	<p>Presents a strategic plan for riverbank stabilization along Georges River from Liverpool Weir to Monash Reserves</p> <p>Four detailed case study are Cabramatta Creek, Moore Reserve Wetland, Clear Paddock Creek and Georges River Bank Stabilisation Strategy</p>	<p>Foreshores are undergoing various forms of erosion and accretion, leading to reduced water quality, loss of land, threatening stability of infrastructure, silt and sediment transport, and impacts of aquatic and terrestrial ecosystems</p> <p>Bank erosion is significant along foreshore areas of Georges River within study area (Liverpool Weir to East Hills)</p> <p>Major mechanisms of erosion are boat waves, wind waves, presence of erosion prone riverbank materials, change in low regimes (dredging), increased runoff and siltation from changes in catchment</p> <p>General channel widening occurring along Georges River in study area</p> <p>Main erosion triggers/issues include increase in flood gradients, presence of dispersive clays, absence of vegetation and change in flow regime at the Weir, Lake Moore inlet, river bend downstream of William Long Bridge and inlet to Chipping Norton Lake</p> <p>Chipping Norton Lakes result of illegal dredging and unregulated extraction activities from 1950's – 1977.</p> <p>Bank stabilization occurred for riverbanks and tailings, removal of ponds exposed to erosion during floods, reduction of flood impacts, and creation of habitat and recreation waterway and parkland assets</p>	None	GRCCC
134	Georges River Gauging and Current Metering August 1991	Hydrodynamics	Overall Georges	1991	MHL	Poor-Medium	Tidal level and current measurement	Tidal characteristics for August 1991	Age of the data Measures only during one month	DECC Library Parramatta
135	Georges River Health potential sites	Raw Data	Upper Georges		Bankstown City Council	Poor	N/A	List of exact location of environmental concern and study name about this place	Some study are ongoing	Bankstown City Council
136	Georges River Hydrographic Surveys - Cross-Section Comparison Plan - Study Area East Hills to Liverpool Weir	Foreshore	Upper Georges	1990	PWD	Medium-Good	Cross-section comparison between East Hills and Liverpool at 100m interval between 1976 and 1989	Changes in widths and depths between East Hills and Liverpool Weir between 1976, 1977, 1978, 1983 and 1989	1989 survey data only for Chipping Norton and Moore Lakes Age of the data	DECC Library Parramatta
137	Georges River Mathematical Modelling Study	Flood	Overall Georges	1992	PWD	Medium	MIKE-11 Mathematical model	Construction and calibration of the flood model	Only construction of the model, no results	DECC Library Parramatta
138	Georges River National Park Plan of Management	Management	Overall Georges	1994	NSW NPWS	Medium	Plan of Management	Describes natural, physical and cultural features of this national park. High priority management items included weed control plan, vegetation survey and develop a walking track system to link with Council walking tracks.	Age of the plan – requires updating	DECC Library Hurstville
139	Georges River Photogrammetrc	Foreshore	Overall Georges	1996	PWD???	Good	Photogrammetric analysis at several sites	Bank erosion estimates	None	DECC Library Parramatta

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
	Analysis - Draft Report									
140	Georges River Reborn - A supplement to environmental bulletin 2 pollution control in Sydney's waterways	Pollution	Overall Georges	1987	SPCC	Medium	Study of the water quality (nitrogen and phosphorus concentrations, dissolved oxygen, water clarity...)	Description of the land and river uses Determination of the main source of pollution Evolution of the water quality and of sources of pollution in 1970s and 1980s Estimation of future (2001) pollution	New mean have to be found to stop future pollution	DECC Library Goulburn St
141	Georges River Regional Open Space - Stage 2 Development Plans and Land Management	Management	Overall Georges	1984	Croft & Associates	Poor	N/A	Development of recreational areas and management General advice on bush fire hazard reduction, trail bike access and car, rubbish dumping, erosion control, weed control, feral animal control and Water Quality monitoring	Age of the report	DECC Library Parramatta
142	Georges River Regional Open Space - Stage 3 Implementation and Administrative Responsibilities	Management	Overall Georges	1984	Croft & Associates	Poor	N/A	Administration of open space, park management, staffing requirement, organisational structure and financial implication	Age of the report	DECC Library Parramatta
143	Georges River Salinity and Temperature Data - May 1979 - September 1986	Water Quality	Overall Georges	1990	PWD	Medium	Salinity and temperature data collection that occurred between May 1979 and September 1986	Monitoring of salinity variation and the extent of tidal exchange between the lower Georges and the Chipping Norton Lake (CNL) Scheme as to ascertain the impact the CNL scheme had on the salt regime of the Georges River and if stratification occurred in the deeper dredged areas of the Lakes area. Variation in salinity over time along the river is almost entirely dependent on freshwater inflow and its response to achieve equilibrium after large freshwater discharges	Age of the data	DECC Library Wollongong
144	Georges River Tidal Discharge Measurement - Bed Sediment Sampling 18th April 1979	Sediment	Overall Georges	1981	PWD/MHL	Medium	Current metering at East Hills, Milperra, Prospect and Cabramatta Creeks Flood level, flow and discharge measurement Water temperature and salinity measurement at East Hills and Milperra Water sampling and suspended sediments analysis Bed sediment sampling and particle size analysis	Summary of tidal behavior on 18 th April 1979	One day of data only Age of the data	DECC Library Wollongong
145	Georges River Tidal Gradients 1981-1990	Hydrodynamics	Overall Georges	1993	MHL	Medium	Tidal model	Tidal plane analysis, tidal criteria and tidal phasing Tidal levels at Milperra in 1988 Tidal ranges increased between 1981 and 1990 and decrease in tidal time lags in upper reaches	Age of the data	DECC Library Parramatta
146	Georges River Water Quality Data	Raw Data	Upper Georges	1997-2008		Good	Raw water quality data	N/A	Raw data without analysis	Bankstown City Council
147	Georges River Water Quality Improvement Proposal EIS	EIS	Overall Georges	1981	MWSDB Caldwell Connell Engineers	Good	EIS	Changing land use patterns resulted in a marked decline in the water quality and amenity of some sections of the river Most pollutants entering the river are from stormwater runoff (main source) and effluent from Glenfield and Liverpool (in dry weather) Preferred option to help manage the future of stormwater and sewerage discharge into the Georges River is a medium term solution – effluent transfer scheme involving the export of all dry weather flows from the STPs to the ocean outfalls Pumping station and pipeline to transfer effluent from Glenfield to Liverpool STP for further treatment before disposal of combined effluent to Georges River Transfer of dry weather effluent from both Glenfield and Liverpool STP to Malabar STP via outfall system.	Age of the report Recommendations of the report have been implemented	DECC Library Goulburn St

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
148	Georges River Water Studies Database - Part 1 and 2	Overall Description Data Compilation	Overall Georges	1997	GRCMC	Good	Collection of past reports relating to the Georges River catchment and its state with regards to various environmental aspects The database details documents collected from state government agencies, universities and consultants and mostly dated from 1970 onwards to 1996 in alphabetical order of the authors with the location and summary of each report as well	Summary of the previous document about the Georges River	None	GRCCC
149	Georges Valley : summary report	Flood	Overall Georges	1981	Sinclair Knight & Partners	Good	N/A	Summary of the report from New South Wales Coastal Rivers, "New South Wales Coastal Rivers Flood Plain Management Studies - Georges Valley"	None	Library Liverpool
150	Geotechnical Reconnaissance Kogarah Bay, Sydney - NSW waterways Programme	Sediments Water Quality Foreshore	Lower Georges	1988	Dames & Moore	Good	Soils testing Stratigraphy	Sediment characteristics, dredging assessment and foreshore stability in the bay Topology, geology, stratigraphy of the bay Maps of bathymetry, sediment composition and heavy metal concentration	Localised study area	DECC Library Parramatta
151	Groundwater Investigation Heron Park Chipping Norton	Groundwater contamination	Upper Georges	2000	New environment		Assessment of potential groundwater contamination resulting from the former use of the site at Heron Park, Chipping Norton , as a landfill Use of two monitoring wells adjacent to the beach at Heron Park Sampling and analysis of the groundwater for total petroleum hydrocarbons, benzene, toluene, ethyl benzene and xylene, poly aromatic hydrocarbons(PAH) and heavy metals	Elevated levels of petroleum in the ground water in the first monitoring well PAH level are satisfactory as well as all metals except nickel in the second monitoring well	Limited time of the monitoring program	DECC Library Wollongong
152	Habitat use by the Double-banded Plover Charadrius bicinctus in Botany Bay	Double-banded Plover Ecology Monitoring	Botany Bay	2003	NPWS	Good	Monitoring study – aim of the study was to identify important feeding and roosting sites and monitor behavior at these sites. Survey included recording behavioural observations during the day and radio-tracking fiver birds during the day and night.	Suggest that population use Penrhyn Inlet and Sydney airport exclusively and therefore development in northern side of Botany Bay requires attention. These species have a larger home range at night, greater use of the airport was recorded which is considered critical for long-term conservation. The results from this study support earlier research that this species utilises a broad range of habitat.	None	DECC Library Hurstville
153	Have we forgotten about flooding on the Georges River	Flood	Overall Georges	2001	Bewsher Consulting	Good	N/A	Description of flood history Summaries of relevant previous flood studies undertaken along the Georges River There is a need of an overall plan for the entire floodplain	None	http://www.bewsher.com.au/pdf/CNF33P_1.pdf
154	Health Aspects of Faecal Contamination – Environmental Control Study of Botany Bay	Water Quality	Botany Bay	1979	SPCC	Good	Use of faecal coliform levels to determine bacterial quality of water	Use of the chlorination should be controlled No prove of impact of sewage polluted water on health Standard of 200FC/100ml are irrelevant	Oyster need further research to determine management techniques	DECC Library Goulburn St
155	Holsworthy Sewerage Scheme Transfer - Draft Representations Report	Sewer	Upper Georges	1998	Sydney Water Corporation	Good	N/A	Holsworthy Sewage Treatment Plant (STP) discharged into Harris and Williams Creek and New Brighton Golf Course utilizes on average 1.0 ML/d of treated effluent for spray irrigation Holsworthy STP should be bypassed and raw sewage transfer to Liverpool STP Works at Liverpool should be amplified and upgraded Project justification in term of ecologically sustainable development are Holsworthy STP discharges in Harris and Williams Creeks do not meet EPA water quality requirements, upgrade of Holsworthy STP would generate substantial costs and it would avoid groundwater contamination	None	DECC Library Wollongong

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
								Design advice on the transfer scheme to minimize environmental impact are provided		
156	Howard Park - Homestead Park Bridge Flood Impact Assessment	Flood	Upper Georges	2000	Willing & Partners Consulting Pty Ltd	Medium	Review of previous report RMA2 model of Howard Park	Flood impact of Homestead Park Bridge has been assessed by comparing the flood level pre- and post-construction for 1% and 5% Average Exceedance Probability flood level Bridge will have a minimum impact	Localised area	DECC Library Wollongong
157	Hurstville Municipality Bushland Management 1987 - Annual Report	Bushland management	Hurstville Council	1987	National Trust NSW	Good	N/A	This report on two parks in the Hurstville LGA, Oatley Park and Evatt Park bordering the Georges River, details bushland management works to date and proposes future management actions. Includes locally rare plant species found in these parks. Recommendation for Council to prepare a Management Plan for Evatt Park in accordance with Clause 8 of State Environmental Planning Policy No 19.	None	Hurstville City Council
158	Hydrology and hydrochemistry of the Lucas Heights waste disposal site and extent of leachate transport in tributaries of Georges River	Water Quality	Upper Georges	1977	UNSW	Medium	Records of the daily rainfall at Lucas Heights during WPCB survey from 08/1971 to 10/1974 as well as the one during SPCC survey from 08/1975 to 03/1976 and from 01/07/1977 to 08/10/1977. Evaporation data from September to October 1977 at Lucas Heights Geophysical investigations at Lucas Heights Electrical resistivity soundings for different location along Lucas Height fill site Leachate detailed composition data at Lucas Heights Landfill Water quality survey for the tributary of Mill Creek between 1941 and 1954 as well as ones in Mill Creek between 1971 to 1974 and 1975 to 1976 Grain size measurement	Description of the geology and physiography of the area Rainfalls, aquifers, chemical composition of water were detailed Landfill operation description and composition, treatment and impact of the leachates produced. Monitoring methods of the water quality, dissolved oxygen, pH and conductivity along Mill Creek and its tributary. Advices to minimise the landfill pollution hazard	Age of the report	DECC Library Goulburn St
159	Identification and Analysis of Autumn Macroinvertebrate Samples	Ecology/Water Quality	Upper Georges	2001	Bankstown City Council	Good	Australian Museum Business Services (AMBS) was commissioned by Bankstown City Council (BCC) to identify and analyse 33 macroinvertebrate samples using SIGNAL (Stream Invertebrate Grade Number Average Level).	The aim of the study was to provide an overall understanding of the ecological health of the creeks using the SIGNAL Index. Nine creek areas in the Bankstown area were sampled and analysed; including Salt Pan Creek and Little Salt Pan Creek. This assessment could be used in future management decisions relating to the creeks. The results of SIGNAL analysis indicate that the macroinvertebrate community of the creeks in general were of poor to very poor condition. This corresponded with the site descriptions of bank erosion, riparian vegetation disturbance and removal and proximity to residential and industrial activity.	None	Bankstown City Council
160	Independent Inquiry into the GR - Botany Bay System	Management	Botany Bay	2001	HRC	Medium	Founded upon previous inquiries made by the commission	Final recommendation to Government about three main issues: - A 'whole system' approach should be adopted - Botany Bay should be managed - Natural areas should be protected Health of the Georges River-Botany Bay system depends on river flow and water supply, stormwater and sewage, natural areas	None	GRCCC
161	Kelso Creek Biodiversity Strategy (info)	Management Ecology	Upper Georges	2003-2006	Bankstown City Council	Poor	N/A	Concept plan for the establishment of a biodiversity corridor along Kelso Creek Description of existing conditions of Kelso Creek and details the improvements that could be made to ensure that the area functions as a biodiversity corridor with improved recreational values	None	Bankstown City Council
162	Kelso Creek Estuary Management Plan	Flood Ecology	Upper Georges		Bankstown City Council	Medium	Sampling of benthic invertebrate and other aquatic animals	Overall description of Kelso Creek characteristics and history Levee protects the creek against flood event up to the 1 in 100 year event but affects mixing and flushing of the creek	Further tests should be performed to refine the pumping proposal	Bankstown City Council

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
								<p>Levee flood gate are usually open and close only when a flood is imminent</p> <p>Piped system have limited capacity which are exceeded in moderate to extreme rainfall events</p> <p>Nine sewer overflow locations are in the Kelso Creek catchment and impact water quality</p> <p>Landfill is the main landuse</p> <p>Bird diversity has reduced</p> <p>Flushing should be improved by pumping from the Georges River to the east arm of the creek</p> <p>Habitats along Kelso Creek have been degraded by urbanization. Lack of estuarine habitat is due to reclamation and the flood levee construction in 1986</p> <p>Low diversity of macroinvertebrate and reasonable diversity of benthic invertebrates</p> <p>Fish and mobil diversity impacted by levee</p> <p>Recommendation to Council are given to improve the creek health</p>		
163	Kogarah Bay Estuary Management Plan	Management	Lower Georges	2005	Kogarah, JWP	Good	Community consultation	<p>Determination of the key issue primarily pertaining to water quality, stormwater, sedimentation, waterway usage, foreshore modification, ecological decline and fragmentation, and open spaces surrounding the bay</p> <p>Establishment of objectives to manage these issues</p>	None	http://www.kogarah.nsw.gov.au/resources/documents/Kogarah_Bay_Estuary_Management_Plan_FINAL.pdf
164	Kogarah Bay Waterways Development Option Report	Management	Lower Georges	1992	PWD	Medium	N/A	<p>Shoreline characteristics, aquatic flora and fauna, geotechnical conditions, wind, wave, tidal conditions, Water Quality and acoustic environment</p> <p>Land use and tenure</p> <p>Water based recreation, facilities and utilisation</p> <p>Demand, constraint and opportunities for the improvement of the recreational facilities with six development options</p>	Localised study area	DECC Library Parramatta
165	Kogarah Bay Waterways Development Preliminary Economic Appraisal	Everything	Lower Georges	1988	PWD	Medium	N/A	Options for improvement of waterways, their costs and benefits	<p>Economical view only</p> <p>Localised study area</p>	DECC Library Parramatta
166	Kyle Bay Survey - Bottom Morphology and Sediment Study		Lower Georges	2007	Kogarah Council	Good	Sediment sampling and geochemistry analysis	<p>Maps of bathymetry, heavy metals concentrations</p> <p>Sediment composition and geochemistry is illustrated into table</p> <p>Impact of overflows on aquatic environment is greatest in some Receiving Environmental Zones</p>	None	Kogarah Council
167	Licensing Sewerage Overflows EIS 1998 Vol 2 - Georges River and Southern Beaches	EIS	Overall Georges	1998	SWC	Good	Water sampling	<p>Environmental quality from Liverpool Weir to Salt Pan Creek has been degraded as a result of past and current catchment activities, eg. Treated effluent discharge, urban stormwater runoff, sewerage overflows, loss of habitat through catchment development, soil erosion, sand and gravel extraction, and introduction of exotic flora and fauna</p> <p>In extended dry weather, saline intrusion extends up as far as the weir.</p> <p>After large wet weather events, saline water is flushed form the estuary upstream of Chipping Norton & may remain fresh for several months</p> <p>Water column does not stratify in the upper estuarine section</p> <p>Downstream of Salt Pan Creek, currents are dominated by tidal flows in dry weather</p>	None	DECC Library Goulburn St

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
								<p>Sewer overflows have a great impact on water quality in the upper reaches after heavy rainfall events</p> <p>General water quality in the lower reaches is good due to strong tidal flushing and nutrient concentration is generally low</p> <p>A recapitulative table of the impact of overflow on aquatic environment all along the Georges River is provided</p>		
168	Licensing Sewerage Overflows EIS 1998 Vol 3 - Southern Suburbs	EIS	Overall Georges	1998	SWC	Good	<p>Complement "Licensing Sewerage Overflows EIS 1998 Vol 2"</p> <p>Assessment of the Southern and Western Suburbs Ocean Outfall Sewer (SWSOOS) system, its performances and characteristics</p>	<p>Determination of the different kind of overflows and their severity</p> <p>Environmental impacts of the overflows from the SWSOOS system have been assessed</p> <p>A preferred management strategy has been proposed and its environmental benefits have been assessed</p>	None	DECC Library Goulburn St
169	Little Salt Pan Creek Biodiversity Corridor Masterplan	Ecology	Upper Georges	2006	Bankstown City Council	Good	<p>Biodiversity Corridor Masterplan</p> <p>The development of this Masterplan included contribution from the local community via consultation workshops.</p>	<p>The corridor was divided into a number of management areas with management actions considering the natural environment, recreational opportunities, aesthetic and environmental value and synergy between flood management and environmental restoration.</p> <p>Proposed actions to enhance the corridor included:</p> <p>Biodiversity Planning Provisions Vegetation Restoration in the Corridor Community Participation Compliance Monitoring</p> <p>Regular monitoring of biodiversity via flora and fauna surveys is recommended as well as ongoing bushland restoration, maintenance, weed control and monitoring</p>	None	Bankstown City Council
170	Little Salt Pan Creek Estuary Management Plan	Ecology Management Foreshore	Upper Georges	N/A	Bankstown City Council	Good	Estuary Management Plan	<p>Estuary management Objectives (long term, up to 10 yrs, and short term, 2-5 yr timeframe) are listed. Also split into Bankstown LGA objectives and Little Salt Pan Creek specific objectives.</p> <p>Report explains management strategies including:</p> <ul style="list-style-type: none"> - An action plan table - Estuary concept masterplan - Outlines Landscape guidelines (and treatments) 	None	Bankstown City Council
171	Liverpool City Council Floodplain Management Plan	Flood	Overall Georges	1987	Liverpool City Council	Poor	N/A	<p>Flood standard description and guidelines for development of flood liable land</p> <p>Land and floor level of protection are detailed for the different type of development</p> <p>Floodplain management structural and non-structural measures are summarised</p>	None	Library Liverpool
172	Liverpool district stormwater management plan	Management Stormwater	Upper Georges	1999	Muston & Associates	Good	N/A	<p>Description of the catchment land use</p> <p>Water quality affected by the impact of some unsustainable agricultural practices and the many on-site systems</p> <p>Farm dams have a significant impact on environmental flows in the creeks</p> <p>Urbanisation results in clearing of native vegetation which increase the impact of silt, nutrient and bacteria in the creeks</p> <p>Main issues are rural source of chemical such as farm chemicals and urban related issues such as litter, contaminated land and rapid urban expansion increasing sewerage system</p> <p>Need for community awareness and involvement</p> <p>Several measures are ranked in accordance with costs and benefits and a recommended program for implementation of the plan is included to assist councils and agencies</p>	None	Library Liverpool
173	Liverpool Weir Hydraulic Investigation	Erosion Foreshore Design	Upper Georges	1978	DPWS	Medium	Physical model	<p>Serious scour will occur and flow velocities increase downstream of the weir due to the Chipping Norton Lake construction</p> <p>Bed protection is required downstream of the weir and is recommended to consist of mattress and rock armour</p>	Age of the report	DECC Library Wollongong

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
								Protection of the left flank of the weir is recommended while protection of the river bank is not recommended		
174	Liverpool Weir Model Study of Mattress Protection	foreshore erosion	Upper Georges	1980	Dept Public Works	Good	Physical model study of mattress protection against scouring at Liverpool Weir at an undistorted scale of 1:50	Study of the impact of a 1 in 5 year and a 1 in 50 year flood events Various scour protection configurations were tested, including mattresses tied together and tied back to the weir structure, or simply placed on the slope and tying the mattresses together provided better protection against scour Description of the flow patterns over the weir in a detailed diagram for discharges greater than 350 m ³ /s It is recommended to place additional mattress protection downstream of the proposed protection at the eastern bank, to place all mattresses on a filter layer, to tie together and anchor the mattresses and to protect the eastern bank against failure	Age of the report	DECC Library Wollongong
175	Lower Prospect Creek Floodplain Management Study Volume 1 - Report	Flood	Upper Georges	1990	Willing & Partners Consulting Pty Ltd	Good	Numerical hydraulic model WILCELL for the flood behavior analysis Flood damage assessment using ANUFLOOD model	Description of the impact of the 1986 flood event and main issues along Prospect Creek Flood mapping for the 1%, 2% and 5% AEP flood Flood damage estimation for the different flood Comparison of various floodplain management option where undertaken and a preferred floodplain management plan was selected and its cost was estimated	None	Fairfield City Council
176	Macroinvertebrate Survey of Natural Streams Within Bankstown City Council – Spring 2000	Ecology/Water Quality	Upper Georges	2000	Bankstown City Council	Good	This survey is a six-month follow-up to a macroinvertebrate survey conducted in Autumn 2000 by Bankstown City Council's Environmental Unit.	These two surveys were carried out in order to assess the health of the natural streams within Bankstown by looking at aquatic macroinvertebrate taxonomic richness. Overall, the natural streams in the southern half of the Bankstown area were very poor in both surveys. The Autumn 2000 survey turned up only very poor to poor SIGNAL ratings in the northern half of Bankstown, however, the northern streams rated from poor to good during the Spring 2000 survey.	None	Bankstown City Council
177	Management & Implementation Plan for the Georges River Combined Councils' Committee	Management	Overall Georges	2007	GRCCC	Medium	N/A	Description of the role of the GRCCC	None	GRCCC
178	Management of Little Tern Sterna albifrons at Towra Spit Island, Botany Bay, NSW Season 2002/2003	Ecology Little Tern Monitoring	Botany Bay	2003	NPWS	Good	Monitoring study	Confirmation of the importance of Towra Spit island for the conservation of the Little Tern in NSW re-confirmed with high productivity of fledglings (43). Recommendations for 2003/2004 season include to retain funding for this program, continue monthly fox-baiting, reduce ant numbers on Towra Spit Island, nest site preparation and bird banding program.	None	DECC Library Hurstville
179	Marine Infrastructure - Asset Management Plan	Foreshore	Lower Georges	2009	Kogarah, WMA Water	Good	Site observation	Assessment of the condition, the expected life and efficiency of the different marine infrastructures located along Kogarah Council Maintenance and management advice were give	None	Kogarah Council
180	Mid Georges River stormwater management plan	Stormwater Water Quality	Overall Georges	1999	Kinhill Pty Ltd	Good	N/A	Brief description of the catchment characteristics Description of several water quality parameters and the impact of stormwater on the water quality 75 structural or non-structural management measures were assessed Recommendations were given with prioritization and cost estimates	None	Library Liverpool
181	Modelling the Catchments of Botany Bay	Pollution	Botany Bay	2007	BBCCI	Good	E2 modelling of Botany Bay, Georges River and Cooks River Analysis of constituents such as TOC, Total Nitrogen, Total Phosphorus, TSS, BOD and Faecal Coliform	Highest mean annual flow generated in north-eastern region of the catchment Urban areas in the north of the catchment are the dominant source of constituent Majority of constituent in Towra Point RAMSAR wetlands emanate from Georges River Areas with the highest pollutants load are along the Cooks River and the lower parts of Prospect Creek	None	http://www.sydney.cma.nsw.gov.au/bbcci/publications/Poll_Load_Modelling_Web_Final.pdf

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
182	Modelling the Catchments of Botany Bay - Council Pollutant Loads E2 Modelling	Pollution	Botany Bay	2008	BBCCI	Good	Follow on report from the Modelling the Catchments of Botany Bay (2007)	Councils delivering the highest pollutant loads to Botany Bay are Sutherland, Campbelltown, Liverpool, Fairfield and Bankstown Clear distinction of the pollutant loading rate of urbanized areas and areas with large areas of bush or rural lands	Work was ongoing to model future land use scenario within the Botany Bay catchment	http://www.sydney.cma.nsw.gov.au/bbccci/publications/Council_loads_V3_Web_April_08.pdf
183	Modelling the Catchments of Botany Bay – Predicted Future Landuse Changes for 2030 & 2070	Pollution Landuse	Botany Bay	2008	BBCCI	Good	Revision of the E2 model to incorporate projected future landuse	Increased in pollutant of 11-22% for 2030 scenarios and 24-46% for 2070 scenarios above 2008 conditions Reductions in pollutant exports must be accompanied with reductions in runoff volume to more effectively reduce total pollutant loads	None	http://sydney.cma.nsw.gov.au/bbccci/publications/Final_Report_2030_2070_Landuse_Modelling.pdf
184	Monitoring of Little Terns <i>Sterna albifrons</i> in Botany Bay - Seasons 1993/1994 to 1995/1996	Ecology	Botany Bay	1996	NPWS / FAC	Good	Monitoring study – surveys include boat surveys, banding of nesting birds, adults and nestlings and general observation of the colony.	The population has decreased due to foreshore development and the construction of the parallel Airport runway in 1993/1994. The Little tern colony was relocated to Towra Spit Island due to the runway construction. Management actions include the relocation of nesting activity to Towra Spit Island, predator control, reduction of disturbance on Towra Spit Island and public education.	None	DECC Library Hurstville
185	Moorebank Lake Development	Design Planning	Upper Georges	1984	DPWS	Poor	N/A	Brief overview of the features proposed for the Moorebank Lake development Illustration of development and development master plan Moorebank Lake future planning management	Age of the report	DECC Library Wollongong
186	Moorebank Lake Planning Study	Planning	Upper Georges	1980	Cox & Corkhill Pty Ltd	Medium	N/A	Visual and recreational character assessment Land use and climate description Several planning option have been compared for Moorebank Lake including total landfill, creation of a freshwater lake and integration into the Georges River Preferred option is to integrate the Lake into the Georges River Residue from the lake construction could be used to create an island and the northern bank should be maintain natural	Age of the report	DECC Library Wollongong
187	Moorebank-Milperra floodway study, City of Liverpool	Flood	Upper Georges	1983	PWD	Medium	Physical hydraulic model	Description of the impact of the 20, 50 and 100years floods on the Milperra floodway as well as the 1873 flood which was 1m higher than the 1 in 100 year event Flood depth and velocities are provided for the different event at Newbridge Road and the natural floodway and flood velocities are mapped for the area Mitigation measure have been studied and compared: the best solution is the voluntary purchase of the properties within the floodway and a second possibility could be house raising	Lack of historical data to calibrate the model and 1956 and 1964 flood event data have been used	Library Liverpool
188	Multivariate Analysis of Georges River Water Quality Data 1990 – 1992	Water Quality	Overall Georges	1992	Scientific Services Branch	Good	Water quality monitoring for 19 sites within the whole extent of the GR between Liverpool Weir and Botany Bay, between March 1990 and February 1992 10 water quality parameters were chosen to characterize the health of the waterway (3 above weir, 4 upper estuary, 3 lower estuary) – faecal coliforms, total phosphorus, total uncombined ammonia, total kjeldahl nitrogen, oxidized nitrogen, total nitrogen, turbidity, DO, pH and conductivity	Wet weather and sewage overflows had a direct correlation with and impact on the overall water quality in the Georges River Site groupings were found which were related to their tidal flushing characteristics All sites changed in a similar manner when weather and overflow conditions changed	Study based on two years of data	DECC Library Wollongong
189	New South Wales Coastal Rivers Flood Plain Management Studies - Georges Valley	Flood Foreshore	Overall Georges	1980	Sinclair Knight & Partners Pty LTD	Good	Study of previous flood studies Questionnaire surveys about flood	Principal flood damage potential are upstream of East Hills (into the Wianamatta shale group) General ignorance of flooding risk within the community Major flood are generated by runoff from the upper catchment. Flood mitigation storage in the upper reaches could reduce flood damage potential Development along tributary creeks should be associated with the	Age of the report Most mitigation works have been completed	DECC Library Wollongong

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
								<p>creation of compensating measures to avoid increase flood flows and damages in the upper reaches of the river</p> <p>Bank instability issues in Georges River are due to wave action resulting from pleasure craft, the presence of dispersive soils in the banks and rain water drainage through the banks instead of fluvial processes</p> <p>Need of improvement in flood warning in Prospect and Cabramatta Creeks catchments</p> <p>Bankstown, Fairfield, Liverpool and Sutherland Councils have introduced policies about flood liability and to set minimum floor levels</p> <p>No authority have responsibility for flood mitigation in the Georges River basin</p> <p>Land use control are detailed</p> <p>Mathematical and physical modeling be undertaken to clarify impact of Chipping Norton Lake</p> <p>A list of mitigation measure is given</p> <p>Flood plain map should be revised to incorporate the lake impact and detailed flood mapping of Cabramatta and Prospect Creek should be undertaken</p> <p>Recommended strategies and flood plain management are given for the Georges River</p>		
190	NSW National Park and Wildlife Service - Interim management guidelines: Towra Point Nature Reserve	Management	Botany Bay	1984	NPWS	Medium	N/A	<p>General information about Towra Point</p> <p>Summary of the guidelines of the management plan of Towra Point</p> <p>Classification of the management work by priorities</p>	Age of the report	DECC Library Hurstville
191	Nutrients and Phytoplankton in Georges River – Environmental Control Study of Botany Bay	Ecology / Water Quality	Overall Georges	1979	SPCC	Good	N/A	<p>This study examines the changes in the levels of chlorophyll-a (an indicator of phytoplankton biomass) and the nutrients, nitrogen and phosphorus. They were found to have high variability. Nutrient distributions along the river were found to be influenced by storms and macrophyte cover, as was the duration and extent of phytoplankton blooms. It was found that these nutrients did not limit phytoplankton growth in the lower freshwater and upper estuarine areas of the river. Another factor, silicon deficiency, was found to limit diatom densities and bloom duration and to cause a change in the dominant phytoplankton species during the 1978 blooms. The Georges River is utilised for a range of purposes, from recreation and oyster farming to a channel for stormwater and treated sewage effluents.</p>	Age of the report	DECC Library Goulburn St
192	Oatley Bay Research Report: Geochemical and Hydrodynamic Studies	Hydrodynamics	Lower Georges	2007	Kogarah	Good	<p>Summary of previous hydrodynamic, hydrological, sediment and geochemical studies</p> <p>Sediment sampling, grain size and geochemical characteristics analysis</p> <p>Drogue tracking</p> <p>Hydrodynamic model of the bay</p>	<p>Mapping of the heavy metal distribution within Oatley Bay</p> <p>Description of estuarine circulation drivers (tides, wind and freshwater input)</p> <p>Description of the bathymetry, salinity, temperature, stormwater dispersion and tidal current</p>	None	Kogarah Council
193	Pedestrian Bridge for Chipping Norton Lakes Scheme - Concept Design Report		Upper Georges	2000	PBP	Medium	N/A	<p>Overall description of the Howard Park Area (topography, geotechnical information, tides, flood)</p> <p>Design characteristics of the bridge</p> <p>Study of different options of construction and the arch bridge is preferred</p> <p>Design scheme and cost estimate are provided for the bridge</p>	None	DECC Library Wollongong
194	Planning the Development of a River Valley with Special Reference to the	Planning	Overall Georges	1964	Munro, C.H., Vallentine, H.R., Forster, D.N.	Poor	N/A	<p>Urging need to collect hydrologic data</p>	Age of the report	DECC Library Parramatta

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
	Georges River NSW									
195	Pollution Control Devices Data (Bankstown LGA)	GPTs	Upper Georges	???	Bankstown City Council	Good	N/A	Raw data about Control Device locations	None	Bankstown City Council
196	Preliminary Archival and Archaeological Assessment - Chipping Norton Homestead		Upper Georges	1985	Wendy Throp	Poor	N/A	Description of the archival history of the area Description of the different building present on the site	Age of the report Some buildings do not exist anymore	DECC Library Wollongong
197	Preliminary Design Report Williams Creek and Harris Creek East Hills - Campbelltown Railway	Flood	Lower Georges	1984	Wargon Chapman Partners	Medium	Flood level and current measurement in Harris and Williams creeks Cross-section of the creeks Rainfall/runoff model XP-RAFTS	Flood levels and currents in Harris and Williams Creeks Study of the construction of the bridge	Age of the report Localised area	DECC Library Parramatta
198	Prospect Creek Analysis of January 2001 Flood	Flood	Upper Georges	2001	Cardno Willing Consulting Group	Good	HydraulicHEC-2 and WILCELL models for the upper reaches and lower reaches of Prospect Creek respectively Hydraulic XP-SWMM model cover both lower and upper reaches	Peak flow estimates and peak flood levels were described Flood mapping of Prospect Creek	None	Fairfield City Council
199	Recreational use in Botany Bay	Recreation	Botany Bay	1978	SPCC	Good	The investigation included a survey questionnaire and the use of aerial photographs to count the number of people, car and boats at various locations.	Investigation of recreational use patterns for the foreshore area of Botany Bay. The assessment considered the influence of environmental factors, recreational facilities and user interests. Different uses considered included picnicking, walking and relaxing, swimming, angling, sailing and power boating. The main reasons for visiting Botany and Kogarah Bays were the ease of getting there, it was a safe place and parking was available. The study concluded that Botany Bay is a regionally important site for water based recreation, particularly for family recreation.	The number of surveys in different parts of the study area was related to usage that was determined by aerial photography taken on one day in summer. The use of one day does not reflect variations in usage. Age of the report	DECC Library Hurstville
200	Rehabilitation of Salt Pan Creek - Stage 2 Stormwater management	Management	Upper Georges	1997	GRCMC	Poor	N/A	Summary of the Salt Pan Creek Rehabilitation project Contractual terms and critics of consultant	Critics and contract only No findings	DECC Library Goulburn St
201	Report on Bank Stability Georges River	Foreshore	Overall Georges	1971	WRL	Poor	Hand written note on Georges River bank stability	Evidence of erosion and causes	Age of the report	DECC Library Parramatta
202	Report on Georges River Flood Mitigation - Floods in the Lower Georges River	Flood	Overall Georges	1966	DPWS	Poor	Flood gauging and flood level measures	Need to implement some mitigation measures, flood forecast and method of estimating flood probabilities Determination of flood level at Liverpool Bridge for flood event from 1 in 20 to 1 in 400 years.	Age of the report	DECC Library Wollongong
203	Report on Geotechnical Investigation - Sandy Point Quarry	Geotech	Upper Georges	1998	DJ Douglas and Partners	Poor	Test bores sandstone sampling for laboratory testing	Detailed description of the sandstone characteristics on the site Geological mapping Proposed extraction area tp be relocated at the western side of the existing quarry	None	DECC Library Wollongong
204	Report on Port of Botany Bay Introduced Marine Pest Species Survey	Ecology	Botany Bay	2002	NSW Fisheries D.A. Pollard and R.L. Pethebridge	Good	This is a report of an investigation into the introduced marine species within Botany Bay that was undertaken in 1998. The survey was undertaken as part of a joint initiative of the Australian Association of Port and Marine Authorities (AAPMA), the CSIRO's Centre for Research on Introduced Marine Pests (CRIMP) and a range of individual state and territory agencies, supported by the Australian Ballast Water Management Advisory Council (ABWMAC). The survey generally followed the sampling protocols developed for the National Australian Ports Surveys by the CSIRO's Centre for Research on Introduced Marine Pests (CRIMP).	The number of introduced species was found to have increased. Previous introductions included four species of crustaceans, three molluscs, several worm species, toxic dinoflagellates, three goby species and the Japanese sea bass. This survey found 18 other introduced species and 15 of an unknown origin. This species have most likely been introduced via ships' ballast water discharge and/or hull fouling, though are not listed as pest species.	This document is a thorough investigation of the introduced species found within the Port of Botany generally following the sampling protocols developed for the National Australian Ports Surveys by the CSIRO's Centre for Research on Introduced Marine Pests (CRIMP).	http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0003/139683/Botany-Bay.pdf

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
205	Report on the Classification of the Georges River and its Tributaries	Water Quality	Overall Georges	1977	SPCC	Good	N/A	Water quality study and determination of zone of significance of the water quality issue Determination of the mean hydrologic data (flows, tidal data) and the main river water uses Description of the catchment nature and characteristics	Age of the report	DECC Library Goulburn St
206	Report on the Georges River with Particular Emphasis on Flooding, Pollution, Extractive Industries and Bank Stability	Flood / Pollution / Foreshore	Overall Georges	1968	Liverpool City Council	Poor	N/A	Flood level for planning purposes are those of the 40 year event for commercial and residential and of the 20 year event for industrial More pollution sampling needed Riverbank stability List of worst flood level at Liverpool Bridge since 1873	Age of the report	DECC Library Parramatta
207	Report to Chipping Norton Lake Authority on Geotechnical Investigations for Tailings Pond Surface Layer at Howard Park, Chipping Norton	Geotechnical	Upper Georges	1998	Jeffery and Katauskas Pty Ltd	Medium	Hand vane shear test Borehole log Water sampling	Howard Park site history and description Recommendations on the methods of rehabilitation are to provide a capping layer of granular material and carry out electro-dewatering where the first option is not practical to carry out	None	DECC Library Wollongong
208	Report to Chipping Norton Lakes Authority on Additional Geotechnical Investigations for Tailings Ponds Management at Howard Park, Chipping Norton	Geotechnical	Upper Georges	1999	Jeffery and Katauskas Pty Ltd	Medium	Additional vane shear testing for Howard Park	Complements "Report to Chipping Norton Lake Authority on Geotechnical Investigations for Tailings Pond Surface Layer at Howard Park, Chipping Norton"	None	DECC Library Wollongong
209	Report to Chipping Norton Lakes Authority on Geotechnical Investigations for Upgrade of Existing Boat Ramp and Carpark at Howard Park, Chipping Norton	Geotechnical	Upper Georges	2002	Jeffery and Katauskas Pty Ltd	Medium	Borehole log Standard penetration test	Description of the topography and subsurface conditions General advice on the preparation of the site before the new boat ramp construction and on the boat ramp design	None	DECC Library Wollongong
210	Report to Chipping Norton Lakes Authority on Geotechnical Investigation for Amelioration of Acid Sulphate Soils at Howard Park, Chipping Norton	Geotechnical	Upper Georges	1999	Jeffery and Katauskas Pty Ltd	Medium	Test pits excavation Environmental laboratory testing	27000m ³ will be removed from Howard Park site and need management due to acid sulphate soils risk Subsurface conditions Recommendation on the containing cells capping layer, bund walls and base	None	DECC Library Wollongong
211	Report to Chipping Norton Lakes Authority on Geotechnical Investigation for Tailings Pond Management at Howard Park, Chipping Norton	Geotechnical	Upper Georges	1999	Jeffery and Katauskas Pty Ltd	Medium	Review of the Tailing Pond Management Plan Groundwater monitoring with piezometer Vane shear testing Borehole logs and laboratory test	Subsurface condition description Recommendation to enhance drainage and desiccation	None	DECC Library Wollongong
212	Residential Development Strategy (Bankstown LGA)	Management Design	Upper Georges	2009	Bankstown City Council	Medium	N/A	Need of 16,000 new dwellings before 2031 Description of the actual and future population and housing demand in the city of Bankstown	Report about urbanization of Bankstown without emphasis on Georges River foreshore	Bankstown City Council
213	Results of a multi-dimensional receiving Water Quality model for Botany Bay (Sydney, Australia)	Water Quality	Botany Bay	2009	BBCCI	Good	Ecological response model construction Historical field data collection	Description of the model and the phytoplankton response to current nutrient load and future scenarios of urban development and catchment development Creation of Ecological Condition Targets to improve conditions in waterways The greatest magnitude and frequency of target exceedances occurred in the upper reaches of the Georges River	None	http://www.mssanz.org.au/modsim09/117/loveless.pdf
214	Review of the Statutory & Institutional Arrangements relating to protecting Water Quality	Pollution	Botany Bay	2008	BBCCI	Poor	N/A	Recommendations on management methods to protect water quality in the Botany Bay catchment	None	http://www.sydney.cma.nsw.gov.au/bbcci/publications/Final_Statutory_and_Institutional_Arrangeme

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
	in Botany Bay									nts_Nov_08.pdf
215	River revival : a management strategy for Liverpool's Georges River corridor	Water Quality Management	Upper Georges	1993	EDAW	Poor	N/A	Water quality in the Geores River Corridor between Glenfield and Haigh Park degraded due to the various human activities Description of the main constraints and opportunities present for cultural leisure development	Most management recommendations are upstream from the study area	Library Liverpool
216	Rocky Shores of Botany Bay and their Benthic Flora and Fauna – Environmental Control Study of Botany Bay	Ecology	Botany Bay	1981	SPCC	Medium	Comparison between artificial and natural rocky shore	Description of the different type of rocky area along the Botany Bay coastline Description of the benthic flora and fauna Value of the rocky shore Species diversity was recorded to decrease gradually on both the natural and artificial rocky shores toward the western shore of the bay. This is a natural characteristic of such estaurine ecosystems.	Age of the report Page 10 & 12 have the same text.	DECC Library Goulburn St
217	Salt Pan Creek – Flood Study	Flood	Upper Georges	1991	PWD	Good	Hydrologic model and quasi 2D dynamic hydraulic model	Catchment description Model description Determination of design levels applicable to the 5%, 2% and 1% ARI event and extreme flood event Maps of design flood contour	None	DECC Library Parramatta
218	Salt Pan Creek Stormwater Quality Management Strategy	Management Stormwater Water Quality	Upper Georges	1996	AWACS	Good	Numerical modelling to assess pollution control efficiency	Description of the Salt Pan Creek estuary (Hydrodynamics, Sedimentation, Flora, Fauna and geology) Assessment of water quality and determination of the pollutants and their sources Monitoring and management of stormwater and pollution control Stormwater management strategy Appendix about land use in the Salt Pan Creek Catchment	None	DECC Library Goulburn St
219	Salt Pan Stormwater Management Plan	Stormwater	Upper Georges	1999	Hurstville Council Bankstown Council Canterbury Council	Good	N/A	Description of stormwater quality and on related issues of vegetation and access management in the riparian zones Recommendation to reduce siltation and pollution through community education Review of administrative arrangements, policies and plans that will improve the controls on development and the effectiveness of maintenance Identification and collection of a number of ecological, economical, managerial and social issues and values Management options and possible monitoring were provided	None	http://www.canterbury.nsw.gov.au/resources/documents/saltpancreekmp3.PDF
220	Sand Extraction Hollywood Picnic and Caravan Park Chipping Norton Lake Scheme	EIS	Upper Georges	1990	PBP	Poor	N/A	General description of the site (land use, access, existing sand extraction works) There will be minimal adverse hydrodynamics or environmental impacts from the Sand extraction works at Hollywood Picnic Ground	None	DECC Library Wollongong
221	Scoping Study for Water Quality Improvement Plan for Botany Bay	Water Quality	Botany Bay	2007	SMCMA	Good	Scoping report as a precursor to the development of a Water Quality Improvement Plan (WQIP) for Botany Bay	Identify key issue including loss of habitat, over-fishing, introduced pests and pollution of the Botany Sands Aquifer, in conjunction with long standing water quality concerns assessment of available information in relation to the requirements of various components of the project, identification of appropriate management zones and identification of further study requirements	None	DECC Library Goulburn St
222	Seagrasses of Botany Bay – Environmental Control Study of Botany Bay	Ecology	Botany Bay	1978	SPCC	Good	N/A	Description of the different type of seagrasses in Botany Bay Distribution and evolution of the seagrasses Benefits of the seagrasses and consequences of their loss Impact of human activities on the seagrasses ion Botany Bay	None	DECC Library Goulburn St

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
223	Sediment Quality Neverfail Bay Kogarah	Sediments	Lower Georges	2006	Kogarah, UWS	Medium	Sediment and water sampling in Neverfail Bay Sediment size analysis	Brief summary of water quality and sediment quality (size, nutrient and heavy metal concentration) within the bay Low level of diffuse pollution may still be occurring in wet weather events from the catchment		Kogarah Council
224	Sediment-bound Metallic Contaminants in Sydney's Estuaries and Adjacent Offshore, Australia	Pollutant	Overall Georges	1993	G. F. Birch	Good	Sediment sampling (offshore and within the Botany Bay catchment)	The Georges River/Botany Bay estuary serves the intensely industrialized/urbanized city core and is important for boating and maritime activities It has been a major repository for urban/industrial waste and are heavily impacted by anthropogenic metalliferous (Cu, Zn, Ni, Pb) loadings. Reduced tidal flushing and extensive anthropogenic discharge results in high values in the upper part of the river, but additional excessive loadings from industrial and shipping activities probably accounts for the highest metal values in bay ends Copper, Zn and Pb discharged from Georges River markedly affect metal distributions in Botany Bay and for Cu and Zn, it appears that a continuous conduit may exist with the offshore. Salt Pan Creek also exhibits high Zn and Pb concentrations related to a waste dump at the head of the creek and to sewage overflow which is activated at times of flooding, but this source does not impact the main estuary channel The majority of estuarine areas are greatly in excess of background values. The most elevated value are found in the upper reaches of estuaries and bay ends. Generally, the central sections of these estuaries are less elevated, but still above background values, whereas for some metals, the lower reaches and mouth areas approach background values	None	DECC Library Goulburn St
225	Sewerage Treatment System Impact Monitoring Program 2008-2011	Management Pollution	Overall Georges	2008	SWC	Medium	Update of the previous monitoring programs	Summary of Sydney Water's monitoring programs Compliance of the monitoring program with DECC monitoring framework Detailed description of the monitoring method for the different location and type of ecosystem studied	Description for the whole Sydney catchment	http://www.sydneywater.com.au/publications/LegislationActs/Sewerage_Treatment_System_Impact_Monitoring_Program_2008-2011.pdf
226	Soil Erosion Potential in the Menai Area – Environmental Control Study of Botany Bay	Erosion	Lower Georges	1979	SPCC	Medium	N/A	Physiology, topology and climate of the Menai area Slope, terrain type, land use, soil type and erosion, erodibility and sediments properties are mapped 95% of the Menai are is subject to soil erosion and could impact the Georges River with sand transported by flowing water	Age of the report	DECC Library Goulburn St
227	Soil Sampling Report - Sampling Site: Tailings Pond Howard Park, Chipping Norton		Upper Georges	1997	New environment	Medium	Soils Sampling with borehole logs	Description of the sediment quality and characteristics at Howard Park The soils have a high net acid generating potential Contamination by nutrients level are very low It is recommended to raise the water level in the sediment lagoon, to assess water quality in the lakes and the sediments lagoon and to conduct a feasibility study on proposals to rehabilitate the area Description of soils types and stable bank slopes	Limited study which does not detail the extent and nature of the sediment layer	DECC Library Wollongong
228	Stability of proposed bank slopes of dredged areas of the upper Georges River	Foreshore	Upper Georges	1968	WRL	Good	Field observation of bank slopes	Advice on surface treatment of stabilised banks bordering proposed Chipping Norton Lake with rip rap protection or beaching History of the impact of the difference ownership at Chipping Norton Homestead	Age of the report	Library Liverpool
229	Statement of Conservation for the Historic Precinct of the Chipping Norton Homestead - Draft Outline of Landscape Conservation Plan	History	Upper Georges	1986	Andrew Prouse	Poor	N/A	Need of archaeological surveys Assessment of the cultural significance of the area Opportunities and constraints of the possible future landuse	Age of the report	DECC Library Wollongong

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
230	Statutory Site Audit Report & Site Audit Statement Moore Reserve	Pollution	Lower Georges	2007	Kogarah Council	Medium	Soils, sediment, water, stormwater, benthos and underwater sampling Gas monitoring wells	Description of Moore Reserve Review of a previous report (GHD, 2006) and recommendations for future works are detailed Health and ecological risks were studied after analysis of the various samples	None	Kogarah Council
231	Strategic Future for the Georges River Combined Councils' Committee	Management	Overall Georges	2007	GRCCC	Medium	N/A	Description of the future strategy of the GRCCC	None	GRCCC
232	Strategic plan for wastewater and stormwater : volume 7-C : Sewerage systems, wet weather flow analysis, southern study area	Stormwater	Lower Georges	1993	Clean Waterways Programme	Good	Hydraulic model of the Lower Georges and Botany Bay	Description of the water quality, sewer system and overflows in Botany Bay and the lower Georges Description of the wet weather capacity of the system and its surcharge behavior Facilities sizing and cost estimate are provided	None	Library Liverpool
233	Supply & Installation of a New Concrete Fence at Chipping Norton Lake, Chipping Norton		Upper Georges	2002	Liverpool City Council	Poor	N/A	Notice to tenderers about the construction of a new concrete fence at Chipping Norton Lake	Tender only	DECC Library Wollongong
234	Sydney Metropolitan Area Harbour Swimming Sites - Lower Georges	Water Quality	Lower Georges	2008	HarbourWatch	Good	Water quality sampling in the main swimming areas	Map of the drain and sewage overflows in the lower reaches of Georges River and in Botany Bay Summary of the faecal coliform and enterococci concentrations in the main swimming areas	None	http://www.environment.nsw.gov.au/resources/beamach/bwsob0708/08483bwaro8ch4bb.pdf
235	Sydney Recreational Boating Facilities - Botany Bay, Georges River and Port Hacking	Foreshore Planning	Overall Georges	1978	DPWS	Medium	Assessment of public access and boat facilities condition	Middle and upper reaches of the Georges River are served adequately at present (1978) by existing ramps in the area Major boat launching facilities be developed at Carss or Dover Park Cost estimation of these facilities is provided Action should continue to locate and reserve foreshore areas for the development of marinas, dry storage areas and public access	Age of the report	DECC Library Wollongong
236	Sylvania Waters Canal Estate - Tidal Data	Hydrodynamics	Lower Georges	1984	PWD	Medium	Sediment sampling within Sylvania Waters Canal	Bathymetry Tide data Current velocity of less than 0.1m/s except under Belgrave Esplanade Bridge where it reaches 0.3m/s Sediments are mostly fines and silts Water Quality, temperature and demand of oxygen data	Age of the report	DECC Library Parramatta
237	Temporal changes in the estuarine flora and fauna of Towra Point, Botany Bay	Ecology Pollution	Botany Bay	1981	Coast and Wetland Society	Medium	Seasonal sampling (every three months for one year) of benthic life in four different habitats (seagrass, sand, mangrove and saltmarsh) and comparison of benthic fauna in the different habitats.	Description of the fauna and flora in Towra Point and erosion. No effect of the oil spill is visible.	None	DECC Library Hurstville
238	Terrestrial Biodiversity of the Georges River Catchment	Ecology	Overall Georges	2004	DIPNR	High Quality	Terrestrial survey of flora and fauna species and vegetation communities	Recommendations included that findings be considered during all land use (and species) management and planning processes associated with the Georges River catchment, conservation priorities identified should be considered in strategic planning and the allocation of economic and social resources to conservation efforts be prioritised to protect and manage Critically Endangered communities and species, and communities that are currently in good condition.	None	DECC Library Goulburn St
239	The Assessment and Management of Floodgates on the NSW South Coast	Ecology Management	Upper Georges	2007	NSW Department of Primary Industry	Good	Identification of top priority sites and management issues	Kelso Creek is considered as top priority area and the floodgate should be improved to allow fish passage to approximately 3km of upstream aquatic habitat	None	Bankstown City Council
240	The banks of the Georges River at Liverpool : a field study	Foreshore	Upper Georges	N/A	Helen Ruttley	Poor		Description of the historical changes of the Georges River along Liverpool Heavy dredging and sand mining have changed the channel direction and tidal patterns which increased erosion and damage to the river banks Brief description of the vegetation and the growth of alligator	Poorly hand drawn maps Very brief description of the different problems	Library Liverpool

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
								weeds, nutrient and phytoplankton due to sewerage		
241	The Chipping Norton Lakes Scheme - A Case Study (Georges River Channel Changes)	Hydrodynamics	Overall Georges	1970s	Bankstown City Council	Medium	Review of several reports from the early 1970s	Description of how the Chipping Norton Lakes may contribute to the bank erosion, river cross-sectional widening and turbidity of the Georges River	Age of the report	Hurstville Council
242	The Chipping Norton Lakes Scheme - A Case Study (Water Quality)	Water Quality	Overall Georges	1970s	Bankstown City Council	Medium	Review of previous reports	Description of the impact of Chipping Norton on water quality, suspended sediments and tidal effect	Age of the report	Hurstville Council
243	The Ecology of Fish in Botany Bay – Community Structure – Environmental Control Study of Botany Bay	Ecology	Botany Bay	1981	SPCC	Medium	Sampling and collection of fish	Description of the different fish habitat Difference between fishes and determination of the fishes communities per habitat	Age of the report	DECC Library Goulburn St
244	The Ecology of Fish in Botany Bay – Environmental Control Study of Botany Bay	Ecology Water Quality	Botany Bay	1981	SPCC	Medium	Measure of turbidity, salinity, rainfalls, Chlorophyll-a	Description of habitats, fish communities and occurrences of the different species of fish and shellfish Impact of Port development on fish habitats	Age of the report	DECC Library Goulburn St
245	The Effect of Construction of Proposed Lake at Chipping Norton on Behaviour of Georges River	Water Quality Hydraulics	Overall Georges	1967	WRL	Medium	Construction of a physical model of the site	Description of the potential effects that the proposed Chipping Norton Lakes were postulated to have on the Georges River's behavior at the time, in terms of tidal regime, sedimentation, pollution, bank erosion and channel stability The Chipping Norton Lakes will not negatively impact the tidal regime, sedimentation and pollution of the Georges River significantly Benefits for flood mitigation are anticipated Minor works were recommended to prevent bank erosion and enhance channel stability	Age of the report Chipping Norton Lakes construction is complete	DECC Library Wollongong
246	The Effects of Sand Mining at Chipping Norton and the Discharge of Treated Sewage on the Upper Reaches of the Georges River	Water Quality Hydraulics	Overall Georges	1974	Macquarie University	Medium	Water sampling in various location along the river	Description of the likely combined effects of the Chipping Norton Lake (CNL) scheme and the discharge of treated sewage above the lakes on the upper reaches of the Georges River Assessment of the divergence that has taken place since the Munro/WRL report done in 1967 for the conceptual construction of the CNL scheme. Description of the current (1974) state of river health in relation to several water quality parameters Description of future implications of current (1974) actions and investigation of several proposed scenarios and their implication on the river's health	Age of the report	DECC Library Wollongong
247	The Georges River Hydraulic Hydrologic and Reclamation Studies	Water Quality Hydraulics	Overall Georges	1967	WRL	Medium	Sediment sampling	Description of the impacts of proposed land reclamation of inlets along the foreshores of the Georges River A max reduction of 10% in the cross sectional area of the river is forecasted if all proposed works are carried forward Proposed works will affect the river regime, and that tidal velocities will be reduced by approx 10%, which can lead to siltation of river channels Pollution problems will also be magnified by reducing the tidal storage available for dilution of contaminants in the lake There is a need to have a coordinated approach to manage the Georges River and to establish a reliable set of data collection and recordings Report describes the history of land use, and the physical properties relating to the Georges River	Age of the report	DECC Library Wollongong
248	The natural environment of Bankstown	Environment	Upper Georges	1994	Lynne McLoughlin	Good	Descriptive study	This study describes the natural environment of Bankstown City Council, including its climate, vegetation communities and fauna. Landuse by Aboriginals and impact from European settlement and the Georges River are also discussed. Case studies of three reserves include Lansdowne Reserve, deepwater Park and Salt Pan Creek Reserve.	Pages missing	Bankstown Library

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
249	The occurrence, distribution and sources of Polycyclic Aromatic Hydrocarbons in the sediments of the Georges River estuary	Pollution	Overall Georges	1992	WRC	Medium	Sediment sampling	Description of the occurrence and fate of Polycyclic Aromatic Hydrocarbons (PAHs) at the Georges River estuary PAH concentration very high in comparison to other Australian estuaries due to a high concentration of 4, 5 and 6 ring compounds. PAH concentration correlated with silt and clay concentration as well as flocculation PAH non correlated with sediment particle size, nor loss on ignition, nor organic matter Combustion products from road-runoff, stormwater drains, sewage or air particles is the major source of PAH Some points source contribute to a high concentration of two ring PAH from marinas and other boating activity	None	ScienceDirect
250	The Simulation of Effluent Movement in the Tidal Georges River Using the Dye Tracer Rhodamine WT	Hydrodynamics	Overall Georges	1979	Bankstown City Council	Good	Dye movement tracer	Dye movements were influenced almost wholly by tidal circulation Poor flushing conditions exist in the upper Georges River and pollutants would be slow to move Under low flow conditions, there is little flushing It is important to have higher levels of sewage treatment to prevent excessive amounts of pollution and water quality degradation	Effluent is assumed to behaved like the dye tracer Age of the report	Hurstville Council
251	The Study and the Region – Environmental Control Study of Botany Bay	Overall Description	Botany Bay	1978	SPCC	Good	N/A	Summary of all the study undertaken by the SPCC in 1978-1979 about geology, topography, bathymetry, climate, hydrodynamics, waves, tides, flows, floods, flora and fauna, impact of development and sand extraction in the catchment, sewerage and water supply	Age of the report	DECC Library Goulburn St
252	The Sydney Floods of August 1986 Volume 1	Flood	Overall Georges	1988	Australian National University	Medium	Survey of the damage and consequences of August 1986 flood	Assessment of damages of the 1988 flood Development to implement on floodplain Response to the flood (what to improve) Climate	Age of the report	DECC Library Parramatta
253	Tidal Flow Pattern of Proposed Lake Chipping Norton on the Georges River	Hydrodynamics	Upper Georges	1968	WRL	Good	Physical hydraulic model	Determination of the possible areas of the lake which may collect surface debris as a result of continuous stagnant conditions during the tidal cycle	Age of the report Chipping Norton Lake layout changed since the report publication	DECC Library Wollongong
254	Tidal Hydraulics of Botany Bay	Hydrodynamics	Botany Bay	1978	WRC	Medium	Physical and mathematical model of Botany Bay and its tributaries	Towra Point Susceptible to wave erosion Tidal impact of reclamation and dredging within the Georges River is limited Historical review of Botany Bay development and works and their impact on hydrodynamics Dead water areas along the Georges River	Age of the report	DECC Library Parramatta
255	Tidal Water Movement in Botany Bay – Environmental Control Study of Botany Bay	Hydrodynamics	Overall Georges	1979	SPCC	Good	Mathematical and physical tidal model	Description of the dredging and reclamation within Botany Bay Description of the impact of developments in Botany Bay on the tidal conditions Description of the tide characteristics	Age of the report	DECC Library Goulburn St
256	Timber Materials & Workmanship Modifications to Homestead Wharf Shearer Park Wharf on Chipping Norton Lake		Upper Georges	1995	Irwin Johnston & Partners NSW Pty Ltd	Poor	N/A	Technical specification for tender about timber materials and workmanship for Homestead and Shearer Park Wharves	Tender only	DECC Library Wollongong
257	Towra Beach Nourishment – Environmental Impact Study	Ecology / Erosion / Management	Botany Bay	2003	SMEC	Good	EIS	EIS undertaken for a proposal to restore Towra beach, including beach renourishment works due to accelerated foreshore recession on Towra Point nature reserve and to prevent potential impacts to Towra (Stinkpot) bay. The study concluded that the proposal would result in an overall positive environmental impact, with the nourished and stabilised beach serving to protect the significant ecological and cultural values of Towra Point Nature Reserve and its wetland environs from the impacts of continued foreshore recession.	None	SMEC

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
258	Towra Point Beach Erosion	Foreshore	Botany Bay	1983	Lawson & Treloar	Medium	N/A	Impact of dredging on Towra Point hydrodynamics, sediment transport and erosion Destruction of seagrasses Recommendation to replenish beach and cost estimate of the work	Age of the report Cost changed with time	DECC Library Parramatta
259	Toxic Chemicals – Environmental Control Study of Botany Bay	Pollution	Overall Georges	1979	SPCC	Good	Sampling of water, bivalves, crustaceans, fishes and sediment	Description of the concentration of trace metal and toxic chemical in bivalves, fishes, crustaceans, water and sediments Impact of these concentration on human health are minimal	Age of the report	DECC Library Goulburn St
260	Turbidity of Botany Bay and Georges River – Environmental Control Study of Botany Bay	Water Quality	Overall Georges	1979	SPCC	Good	Water samplings at different location around Botany Bay Various methods of turbidity measurement	Description of the turbidity in Botany Bay and the Georges River Determination of the impact of tide, weather, sea and swell conditions on the turbidity in Botany Bay as well as the effect of the rivers entrances Determination of the most turbid areas Determination of the turbidity sources and causes in Georges River Description of the turbidity all along the Rive	Age of the report	DECC Library Goulburn St
261	Water and Wading Birds of the Botany Bay Estuary – Environmental Control Study of Botany Bay	Ecology	Botany Bay	1979?	SPCC	Medium	N/A	Description of the birds and their usual habitats in Botany Bay Impact of the Botany Bay developments on bird life Botany Bay contains the last major habitat in the Sydney area and one of the largest and best preserved on the NSW coast for species dependant on saline wetlands. Botany Bay is considered to be a very important stopover or resting area along the east Australian coast flighth way for migratory waders in transit to and from overwintering areas in southern Australia. Conservation measures in the bay are strongly recommended to incorporate suitable buffering between roosts and public access areas, in particular around Towra Point, this is to limit disturbance by off-road vehicles, boats, fisherman and others. Changes to bird use of some areas due to development, demonstrate the need for detailed consideration of existing bird use during environmental assessment of future developments. In addition, there is a need and opportunity to create suitable bird habitat during and after development as it has been recorded that some bird species rapidly utilise new habitat.	Age of the report	DECC Library Goulburn St
262	Water Movement and Salinity in Georges River – Environmental Control Study of Botany Bay	Hydrodynamics	Overall Georges	1979	SPCC	Good	Drogue movement study Sounding and tidal height studies Mathematical and physical models Salinity measurement	Description of the water movement and the salinity in Botany Bay and the Georges River	Age of the report	DECC Library Goulburn St
263	Water Quality in the Georges River Estuary	Water Quality	Overall Georges	1979	UNSW	Medium	Mathematical model of the Georges River	Calibration of the model Salinity, phosphorus concentration Changes in tidal prism generate increase in flushing time	Age of the report	DECC Library Parramatta
264	Water Quality Modelling Study of the Georges River System	Water Quality	Overall Georges	1971	MWSDB	Poor	Water Quality numerical model of the river	Water Quality results	Age of the report	DECC Library Parramatta
265	Wave Action in Botany Bay – Environmental Control Study of Botany Bay	Hydrodynamics	Botany Bay	1979	SPCC	Good	Creation of a physical model of Botany Bay	Description of the wave climate Wave climate changes, erosion, accretion and other consequences resulting from the development within the bay	Age of the report	DECC Library Goulburn St
266	Wetlands of Botany Bay and its Tidal Waters – Environmental Control Study of Botany Bay	Ecology	Overall Georges	1979	SPCC	Good	Discussion of current knowledge of wetlands. No survey conducted.	Botany Bay estuary is greatest in area along the southern shores and is of regional and state significance. The wetlands cover approximately 1000 hectare and include mangrove wetlands, salt marshes and freshwater wetlands. Estuaries provide habitat for a range of bird species. Historically Botany Bay wetland covered a greater area. Reduction is due to destruction, damage or modification as a result of urbanisation and industrial development and has affected an area of 500ha. The different components of wetlands area discussed. A map of mangrove, freshwater swamps and saltwater swamps will aid comparison with more recent	Age of the report	DECC Library Goulburn St

	Title	Keyword	Region	Year	Source	Quality	Methodology	Key Findings	Document Limitations	Document Location (Library, Council or Weblink)
								documents to see changes in distribution.		
267	Wildlife at Moore Reserve Wetland	Ecology	Lower Georges	2004	Kogarah	Medium	Bird observations	Description of birds species observed from September 2001 to January 2004 at Moore Reserve Wetland. The biodiversity of species is reported to be a success story for the re-creation of wetland habitat. Species included Dusky Moorhen, Latham's Snipe and Clamorous Reed Warbler.	Source unknown	Kogarah Council
268	WSUD Adoption Strategy for the Botany Bay Catchment	water	Botany Bay	2008	BBCCI	Poor	Interviewed with councils	Description of the LGAs characteristics and of the WSUD tools (LEP, planning tools) Results of the councils interviews	None	http://www.sydney.cma.nsw.gov.au/bbcci/publications/BBCCI_WSUD_Adoption_Strategy_FINALV3_Nov08.pdf
269	Yeramba Lagoon Masterplan (draft)	Ecology Management Stormwater	Upper Georges	2009	Bankstown City Council	Medium	Masterplan	Description of the Yeramba Lagoon Lagoon is very eutrophied due to high nutrients level and lack of tidal flushing Main actions to be undertaken are control of pollution sources, reintroduce tidal flow, regenerate degraded bushland, reduce weed growth, improve the track network through the park and encourage community involvement Long-term goal is to re-establish the lower part of the lagoon as an estuarine ecosystem Management recommendations are provided	None	Bankstown City Council