

A list of dates relevant to the change of wetland habitats at Kooragang Island and elsewhere in the lower Hunter River.

(Reprinted with permission from Williams,R.J, F.A. Watford and V. Balashov. (2000) Kooragang Wetland Rehabilitation Project: History of Changes to estuarine Wetlands of the Lower Hunter River NSW Fisheries Final Report series No.22 (2000)

DATE	EVENT
	<u>1796-1895 Early Development Stage</u>
1796	Fishermen driven ashore find coal littering the beach near the unnoticed mouth of the Hunter River (Perry 1963).
1797	Discovery of the mouth of Hunter River by Lt. J Shortland when directed by Governor Hunter to recapture convicts escaped from the Sydney settlement (Coffey 1973). Subsequently, two commercial vessels visit the river, one of which carries coals and cedar to Sydney (Perry 1963).
1799	First coal shipment (Manley 1963).
1801	Under orders from Governor Hunter, the lower Hunter River is surveyed by Lt. Col. W. Paterson. Paterson gives the name "Ash Island" to what we now know as Moscheto Island after the trees which resembled the English ash (cedar and gum trees were also present). A sawpit is dug on the island and operates for some months. Ensign Barralier produces the first map of the group of large islands in the lower Hunter River. First rock and sand wharf facilities constructed in the vicinity of present day King's Wharf (Anon. 1950, Anon 1954, Manley 1963, Coffey 1973).
1802	Closure of first penal settlement at Newcastle (Perry 1963).
1804	Second penal settlement when convicts from the Castle Hill uprising are sent to Newcastle (Perry 1963, Hartley 1995). Sydney Gazette reports "Strata of coal is immense, quantities of fish are easy to be procured and up the river is an abundance of wildfowl". (Anon. 1804)
1808	Salt production halted and lime (burning of oysters) begun (Perry 1963).
1818	Howe's Road from Windsor to Wallis Plains (Maitland) (Perry 1963).
1818	Breakwater to Nobby's Island begun (Manley 1963, Dames and Moore 1978).
1819	Traffic in people and convicts on Howe's Road (Perry 1963). Maitland flood (Perry 1963).
1822-1823	Penal settlement at Newcastle closed; new penal settlement started at Port Macquarie (Perry 1963, Hartley 1995).
1827	Newcastle resident Mr A.W.Scott buys 1000ha of land on Ash Island [Ed. here Ash Island refers to the large western most island in the Hunter estuary, now the western end of Kooragang Island.] and plants an orange orchard. His oranges become famous throughout the colony (Anon. 1993)
1829	The islands of the lower Hunter are described in the Sydney Gazette as "abounding in fish, duck, kangaroos and pigeons" (Ruello 1976).
1825-1828	Drought, followed by wet period (Hartley 1995).

- 1830** First small farmers (squatters) on Dempsey Island (Turner in prep.)
- 1831** Daily vessels track from Sydney to Newcastle to Morpeth (Manley 1963).
- 1836** Saltworks constructed on Moscheto Island; later sulfuric acid plant is built and operated until 1870 (Coffey 1973).
- 1840** Depression and drought in NSW (Hartley 1995).
- 1842** Except for swampy foreshore downstream, both banks of Hunter cleared between Newcastle and Morpeth (Hartley 1995).
- 1845** Dairy farming commences on the islands (Anon. 1954)
- 1846** Nobby's Breakwater completed, but later breached by storms (Manley 1963).
- 18??** Commercial prawn fishing commences in the Hunter River in mid 1800s (Ruello 1969, Turner in prep.).
- 1854** Nobbys' Breakwater repaired (Manley 1963).
- 1857** Major flood.
- 1858** King's Wharf begun; land for Newcastle railway station reclaimed (Manley 1963).
- 1859** Possibly stemming from the flood and/or the need to load coal, dredging is commenced in Newcastle Harbour and approach channels, with the spoil being dumped east and west of Bullock Island. Dredging continued intermittently for many years (Manley 1963, Coffey 1973, Dames and Moore 1978).
- 1860s** Floods
- 186?** Start of Walsh Island in the early 1860s from spoil dredged to make a channel to the site on which the steelworks now stands (Dames and Moore 1978).
- 1862** Bullock Island reclamation further enhanced with the construction of a long training wall known as the Bullock Island Dyke along the alignment of the South Channel (Manley 1963, Coffey 1973).
- 1864** Flooding serious enough to wash away approaches to vehicle and railway bridge, isolating East and West Maitland (Hartley 1995).
- 1866** Scott's farm fails and his property is cut into farms (Anon. 1893a, Turner in prep.). [Ed. Subdivided into smaller farms].
- 1867** Ballast jetties built at Bullock Island (Manley 1963).
- 1868** Wallaroo Mining and Smelting Co. opens a copper works at Port Waratah, works closed in 1893 (Turner in prep.).
- 1872** Dempsey Island Salt Works erected (Turner in prep.).
- 1878** Wharf construction along southern bank completed (Manley 1963).
- 188?** Newcastle railway station built on reclaimed land.
- 1886** District Inspector of Schools reports a population of 220 on Moscheto Island, 62 of school age.
- 1890** Construction of Miller's Forest Wharf (Manley 1963).

1893 The "Great Flood" causes Moscheto Island residents to take to the roofs and leaves a dry area of about 2 ha near the school at the eastern end of the island (Anon. 1986). Moscheto Island is "suffering effects of excessive rains, and in consequence the grass is almost perished" (Anon. 1893b).

1896-1950 Mid Development Stage

1896 BHP acquires 10 ha of waterfront land at Wallaroo to smelt lead and zinc ore. Smelter did not proceed (Anon. 1935).

1898 Construction of the first section of the Walsh Island training wall; reclamation continues behind it for the next 20 years (Manley 1963, Coffey 1973). Construction started on southern guide wall; completed 1902 (Manley 1963).

1899 Bullock Island merged with mainland; small islands in the North Channel removed.

1901 Further reclamation of Bullock Island (Manley 1963).

1903 Start of series of reclamations at Throsby Creek (Manley 1963).

1907 Two fishing boat hire services with 60 boats between them are available in Newcastle but this is not adequate to meet the demand for recreational fishing (Ruello 1976).

1912 Newcastle Iron and Steel Works Act of 1912-1913 is passed to allow the construction of heavy industrial facilities (Anon. 1935). The Act provides 40 ha of Crown Land and grants a 50 year lease on a water frontage of 14 ha; the State government undertook to dredge and maintain a channel between the works and the sea; the company also purchased another 46 ha freehold (Anon. 1935).

1913 State Engineering Workshops, including dockyard, commenced at Walsh Island. NSW Minister for Works resumes 240ha of Moscheto Island for homes for Dockyard workers. No homes were ever built on Moscheto Island for this purpose; they were built at Stockton instead (Anon. 1940, Coffey 1973).

1913-1928 Levee bank constructed around Fullerton Cove; large drains including Dawson's, 14 ft., 10 ft., and numerous side drains dug, beginning of ring drain.

1915 Production of steel by BHP commences at the Port Waratah works; Walsh Island dockyard and shipbuilding flourishes from this time (Coffey 1973).

1917-1928 Carrington Wharf (old Bullock Island) constructed; start of wall to link Goat, Walsh and Spectacle Islands, and subsequent reclamation; reclamation at Wickham and Throsby Creek (Manley 1963). Wharf construction around the east side of Bullock Island extended along the northern shore. Walsh, Goat and Spectacle Islands further consolidated by reclamation.

1930 Public Works Department constructs weir between Hexham and Ash Islands to increase flow in North Channel and lessen siltation (Manley 1963, Turner in prep., J. Latham pers. Comm..)

1933 One outcome of the Great Depression is the closure of the Walsh Island dockyard and the termination of reclamation begun in 1898 (Coffey 1978).

1935 Large scale removal of shell from Fullerton Cove by the Sulphide Corporation for cement manufacture (Turner in prep.).

1938 Construction of Wallis Creek floodgates at Maitland (Manley 1963).

- 1939-1945** The Second World War enhances industrial output from the Hunter district. Anti-aircraft batteries are placed on the eastern end of Moscheto Island (V. Deacon pers. comm.).
- 1941** State Dockyard established (Manley 1963).
- 1947** Newcastle Chamber of Manufacturers proposes the extension of port facilities and new industrial sites including "development of islands in the lower Hunter River into industrial land" (Coffey 1973).
- 1950** NSW Government approves BHP application to block off Platt's Channel to use firstly as a disposal site for waste and then as an expansion site for industrial facilities (Irwin 1968).

1951-1989 Late Development Stage

- 1951** Dredging and island reclamation/consolidation is recommenced (Dames and Moore 1978, Turner in prep.).
- 1953** Newcastle Harbour Improvements Act is passed. Resumption notices are issued to 17 families on Ash Island; NSW Public Works is given ownership of the Kooragang islands and the formal responsibility to construct a "single land mass" and coordinate all industrial development and servicing. Reclamation commenced almost immediately with material dredged from the harbour (Coffey 1973).
- 1954** Bunds placed in Platt's Channel.
- 1955** 1:200 year flood in the Hunter Valley (Coffey 1973).
- 1958** Walsh and Moscheto Islands are linked by reclamation; Walsh and Dempsey Islands joined by filling in Moscheto Creek (Dames and Moore 1978). A gravel road is built along the southern shore of Ash Island to link the Ash Island Bridge to the site of the future Stockton Bridge (Turner in prep.)
- 1960** BHP begins to fill Platt's Channel (Anon. 1960). Northumberland County Planning Scheme was introduced, under which Kooragang Island was zoned Industrial B (Heavy), meaning that industries other than those considered to be offensive or hazardous could be established on the island (Coffey 1973).
- 1963** A record monthly prawn catch from Stockton Bight after repeated large scale flooding of the Hunter region in April and early May (Ruello 1973).
- 1964** Greenleaf Fertilizers Ltd. is the first company to take up a lease on Kooragang Island (Coffey 1973).
- 1965** Tourle Street Bridge links Kooragang Island with Mayfield (Dames and Moore 1978).
- 1966** Start of construction of railway which cuts Moscheto Island in half, facilitating reclamation of the southern portion of Moscheto Island and Dempsey Island. West bank of North Channel stabilised with training and retaining walls (Moss 1983).
- 1967** Mouth of Mangrove Creek filled for road construction (Moss 1983).
- 1967** Seaham Weir constructed (Ruello 1976).
- 1968** Kooragang Island officially named by NSW Geographical Names Board (NSW Government Gazette 1968).

- 1968** Minister for Public Works approves Williamtown-Long Bight- Tomago drainage scheme including enlargement of ring drain and heightening of levee bank around Fullerton Cove (Turner in prep.).
- 1969** Highest recorded salinity at Raymond Terrace (18.2 ppt.) after a large high tide. (Ruello 1976).
- 1969** Levee banks constructed along the Hunter River at Miller's Forest (upstream of junction with the Williams River) (Ruello 1976).
- 1970** Construction of floodgates at Ironbark Creek (Hexham Swamp)(Ruello 1976).
- 1971** Stockton Bridge completed (Dames and Moore 1978); high dust carryover to Stockton and elsewhere from industries sited on Kooragang in the late 1960s causes residents' complaints (Coffey 1973).
- 1972** Ramsar Agreement on wetlands of international significance especially in terms of waterfowl habitat (Ramsar 1996).
- 1973** The "Inquiry into Pollution" is begun in June to deal with residents' complaints. This is the first inquiry conducted under the terms of the State Pollution Control Commission Act of 1970. Over 300ha now fully reclaimed under Newcastle Harbour Improvement Act. The NPWS and (the then) State Fisheries advocate the extension of Moscheto Creek to overcome the ecological problems arising from the blockage of the creek by the railway (SPCC 1973).
- 1972** 650 acres now fully reclaimed under Newcastle Harbour Improvements Act; Minister for Works announces 600ha (19%) of Kooragang Island to be left in its natural state (Coffey 1973).
- 1976** Ring drain around Fullerton Cove begun (Kingston and Ferster Levy 1998) Reed beds not yet regrown at Miller's Forest after dragline construction of river levee in 1969 (Ruello 1976).
- 1979** The Kooragang Advisory Committee, constituted by the Minister for Works to resolve a number of alternative planning ideas, provides its first report recognising different attributes and potential of areas "A-E" (Moss 1983).
- 1981** Department of Planning and Environment commissions the NSW Institute of Technology to report on the natural areas of Kooragang Island (Moss 1983)
- 1983** Kooragang Nature Reserve is gazetted by the National Parks and Wildlife Service.
- 1985** Promulgation of SEPP 14 establishes protected wetlands in NSW, including Kooragang Island (Adam *et al.* 1985).
- 1990** The culvert at the mouth of Cobbans Creek is washed out (Genders 1996).

References.

Adam,P., N. Unwin, P. Weiner and I.Sim (1985). *Coastal Wetlands of New South Wales*, a Survey and report prepared for the Coastal Council of New South Wales. 125 pp.

Anon. (1804). Sydney Gazette. 24/9/1804.

Anon. (1893a). Newcastle Morning Herald. 8/4/1893

Anon. (1893b). Newcastle Morning Herald. 16/10/1893

- Anon. (1935). BHP Review. Jubilee Edition.
- Anon. (1940). Newcastle Morning Herald. 28/6/1940
- Anon. (1950) Newcastle Morning Herald. 24/5/1950
- Anon. (1954). Newcastle Morning Herald. 16/10/1954
- Anon. (1993) Newcastle Morning Herald. 16/10/1993
- Coffey, E.J. (1973). *Inquiry into Pollution: Kooragang Island, Report and findings of the Commissioner*. State Pollution Control Commission. 72pp.
- Dames and Moore (1978). *An assessment of the effect on the environment of the proposed Stage II landfill scheme at Kooragang Island, Newcastle, New South Wales*. Report to the NSW Dept. of Public Works
- Genders, A.J. (1996). *Interaction of marsh and pasture species on Kooragang Island*. G.Dip.Sc. Thesis. University of Newcastle. 103pp and appendices.
- Hartley, D. (1995). *Men of Their Time, Pioneers of the Hunter River*. Aquila Agribusiness Pty Ltd., North Arm Cove. 178pp.
- Irwin, P.G. (1968). *Reclamation of the Hunter River Islands*. Australian geographer 10:413-414.
- Kingsford, R.T. and R. Ferster Levy. (1998) *Changes to the Hunter River estuary, 1801-1996, and their implications for migratory wading birds and other waterbirds*. A report to Environment Australia.
- Manley, F.S. (1963). *Newcastle Harbour-Hydrological History*. Report No. 102, Dept. of Public Works, Harbours and Rivers Branch, Hydraulic and Soils laboratory, Manly. 35pp. and appendices.
- Moss, J. (ed.) (1983). *An Investigation of the natural areas of Kooragang Island, Hunter River*. A report prepared by C.C. Field & Associates and Insearch Ltd for the Dept. of Environment and planning, Sydney.
- Perry, T.S. (1963). *Australia's First Frontier, The Spread of Settlement in New South Wales 1788-1829*. Melbourne University Press in association with the Australian National University, Parkville. 163pp.
- Ramsar. (1996). *The Convention*. A pamphlet produced by the Ramsar Convention Bureau, Switzerland.
- Ruello, N.V. (1969). *Hunter region fishery*. The Fisherman 3:20-24
- Ruello, N.V. (1976). *Environmental and biological studies of the Hunter River*. Operculum, 76-84.
- State Pollution Control Commission. (1973). *Inquiry into pollution from Kooragang Island, Transcript of evidence*. State Pollution Control Commission. 222pp.
- Turner, J. (in prep.) *History of the islands of the Hunter River*.