## Early historical evidence of sediment discharge in the Fitzroy River

In his account of the circumnavigation of Australia in *Investigator*, including a foray into Keppel Bay in August 1802, Lieutenant Matthew Flinders RN commented on the numerous shoals in the southern part of the bay and the colour of the water there. He wrote:

Keppel Bay was discovered and named by captain Cook, who sailed past it in 1770. A ship going in will be much deceived by the colour of the water; for the shores of the bay being soft and muddy, the water running out by the deep channels with the latter part of the ebb, is thick; whilst the more shallow parts, over which the tide does not then set, are covered with sea water, which is clear. Not only are the shores for the most part muddy, but a large portion of the bay itself is occupied by shoals of mud and sand.<sup>1</sup>

Flinders marked the area between the later-named Egg and Flat (now Mud) Islands on his chart as consisting of 'soft mud'.



Part of Flinders' chart showing Keppel Bay, 1802.

Although he did not speculate on the possibility of a major river, Flinders explored several openings into Keppel Bay, including the Fitzroy as far as 'Central Island'. This was probably Dunlop Island rather than the Central Island located adjacent to Hawk Point on later maps.

<sup>(</sup>Flinders, 1814)



Enlarged portion of Flinders' chart.

(Flinders, 1814)

More than a century later, in 1911, former Harbour Master for Rockhampton, Albert Sykes, also referred to the Fitzroy's naturally heavy sediment burden in one of his periodic newspaper articles contributed under the appropriate pen-name, 'S.E.A'. After discussing fish, dugongs, turtles, sharks and other sea creatures in his account of the coastal fishing industry, Sykes said of oysters:

The waters of the Fitzroy River and Keppel Bay do not lend themselves readily to oyster culture. The quantity of silt held in solution and circulation, and which precipates (sic.) in a slack current, suffocates the bivalve when it is laid in culture beds at low-water level.<sup>2</sup>

Another commentator on the amount of silt transported downstream by the river, particularly during floods, was the also aptly named Fitzroy (Roy) Jardine, a geographer of note and later Headmaster of The Rockhampton Grammar School. Throughout his 1923 research article, entitled 'The Physiography of the Lower Fitzroy Basin' and

undertaken for the Barrier Reef Committee, Jardine noted rock types in the catchment and the erosive force and silt burden of the river:

The general trend of the Fitzroy is along the strike of the rocks, and the shales, mudstones, and sandstones have readily yielded to the erosive power of the Fitzroy and its tributaries... A vast quantity of silt is carried down, and considerable damage by flood erosion is effected along the banks....[and]...the Fitzroy becomes heavily over-burdened with sediment.<sup>3</sup>

## **References:**

<sup>1.</sup> Matthew Flinders, A Voyage to Terra Australia, vol. 2, 1814, p. 28 [facsimile]

S.E.A., 'The Fishing Industry: What is to be found in Central Queensland Waters', *Capricornian*, 4 November, 1911, p. 47.

<sup>3.</sup> Fitzroy Jardine, 'The Physiography of the Lower Fitzroy Basin', *Queensland Geographical Journal*, vol. 38, no. 24, 1923, pp. 2,12, 23.