Buoy-mounted data collection system for validation of the Tasman Bay model
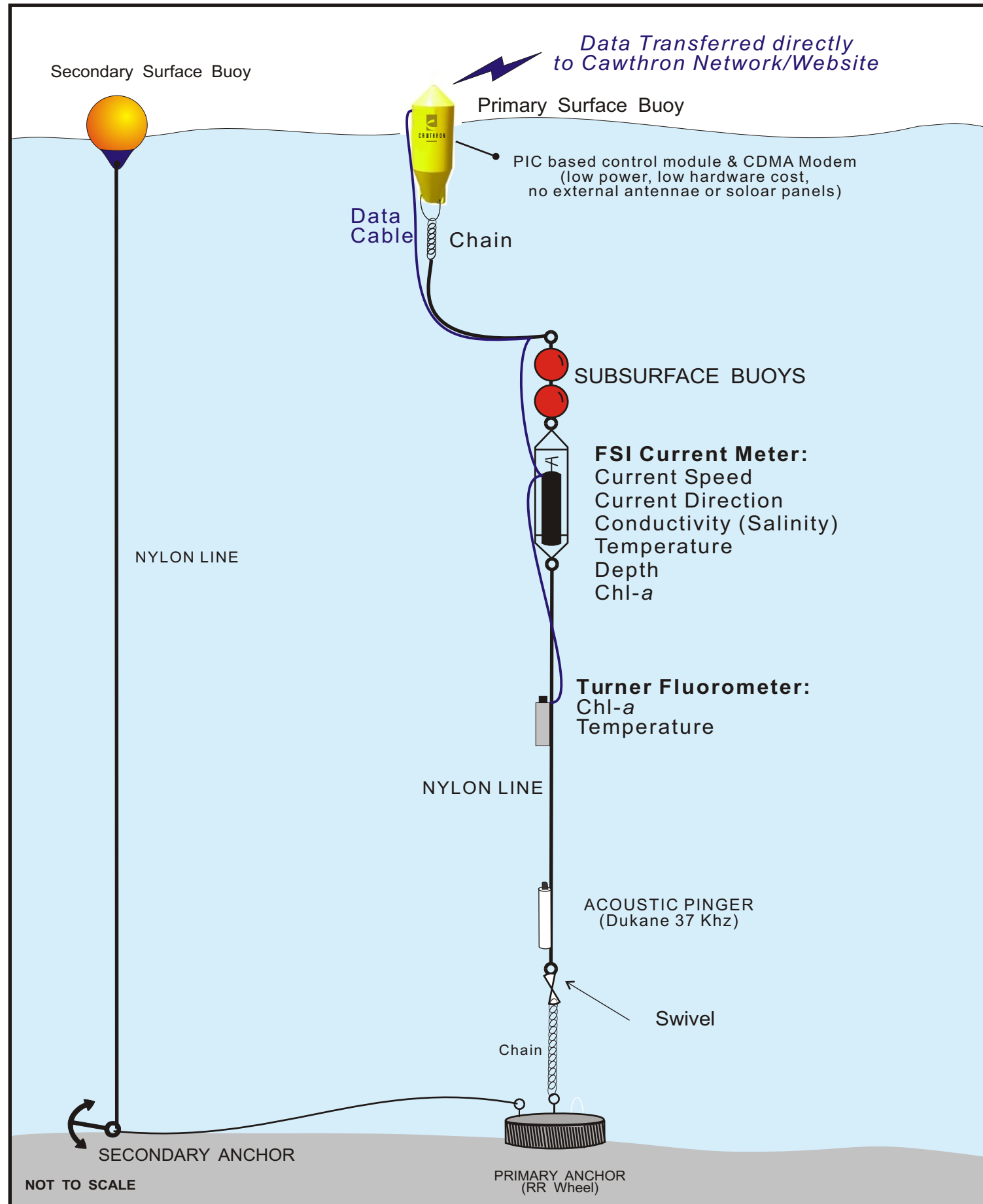
Manaaki Whenua
Landcare Research

TDC Tasman District Council

CAWTHRON

Data Transferred directly to Cawthron Network/Website

Secondary Surface Buoy

Primary Surface Buoy

PIC based control module & CDMA Modem
(low power, low hardware cost,
no external antennae or soloar panels)

Data Cable

Chain

SUBSURFACE BUOYS

FSI Current Meter:
Current Speed
Current Direction
Conductivity (Salinity)
Temperature
Depth
Chl-*a*

Turner Fluorometer:
Chl-*a*
Temperature

NYLON LINE

NYLON LINE

ACOUSTIC PINGER
(Dukane 37 Khz)

Swivel

Chain

SECONDARY ANCHOR

PRIMARY ANCHOR
(RR Wheel)

NOT TO SCALE

Example of circulation in Tasman and Golden Bays as simulated by the hydrodynamic model