

## POVERTY BAY/FLATS

### DATA BASES

- ❑ Water Well Logs ~300 (~50 detailed logs) – GDC/GNS
- ❑ National Petroleum Data Base (limited seismic lines) – GNS
- ❑ Radiocarbon data (wood/shell) – GNS
- ❑ National Fossil Record – GNS/GSNZ
- ❑ DEM (0.5 m) – GNS
- ❑ Q-map 1:250,000 Geology (GIS layer) – GNS
- ❑ Holocene Terraces (GIS layer) – GNS
- ❑ Pollen and shell (McGlone/Pullar/Wilmshurst) – Landcare
- ❑ Archaeology – DOC
- ❑ Bibliographies – GNS/Landcare/NIWA
- ❑ Soil Chronosequences (Pullar) – Landcare
- ❑ W4 core (last 6.5 kyr) and other floodplain cores – Landcare
- ❑ Water and Sediment Gauging Records (Kanakanaia/Matewhero/Goodwin Road/Pikes Weir, limited bedload) – GDC/NIWA
- ❑ Estimates of flood peaks (>60 yr) – GDC
- ❑ Channel Cross Sections (0.5 mile interval, 1948 to present) – GDC
- ❑ Hydraulic Model (Mike11) – GDC/U. Auckland
- ❑ Water quality (Kanakanaia, monthly present; Gisborne Water Supply Catchment) – NIWA/GDC
- ❑ Land Capability Survey (1994/5, GIS layer) – Landcare
- ❑ Aerial Photographs (1939 – 1938, historical oblique photographs) – GDC/Landcare
- ❑ Historical shoreline and beach profiles and historical maps – GDC/NIWA
- ❑ Rainfall records (~1880 – present) – GDC
- ❑ Climate data – NIWA/Landcare GDC
- ❑ Long term tide gauge record – GDC
- ❑ Tidal model of NZ – NIWA
- ❑ Poverty Bay bathymetry/circulation model/bottom sediment – NIWA/U. Waikato/GDC
- ❑ Wave climate (Wainui beach, 20 yr hindcast wave model for NZ) – NIWA
- ❑ Intermittent 3.5 kHz sidescan sonar survey – U. Waikato
- ❑ Miscellaneous surface cores

### GAPS

- ❑ High-resolution subsurface data on PB Flats and nearshore
- ❑ Structural setting of PB Flats
- ❑ Continuous Suspended Sediment data at Matawhero
- ❑ Total load at Matewhero
- ❑ Sediment budget of Poverty Bay (input, output and output source terms)
- ❑ Late Holocene disposition of flats, shoreline and mouth
- ❑ High-resolution bathymetric and inner shelf oceanographic data

## FILLING GAPS

- High-resolution subsurface data on PB Flats and nearshore  
GPR, high-resolution seismic and Chirp surveys, borehole ground truth
- Structural setting of PB Flats  
Seismics and borehole ground truth
- Continuous Suspended Sediment data at Matawhero (& Pikes Weir)  
Optical turbidity sensors, auto-sampling, salinity, temperature
- Total load at Matewhero  
Depth integrated and point suspended sediment sampling and bedload sampling
- Sediment budget of Poverty Bay (input, output and output source terms)  
Near mouth and bay tripods, high-resolution bathymetric surveys, inner shelf oceanographic data
- Late Holocene disposition of flats, shoreline and mouth  
Seismics and borehole ground truth (deep core near coast)
- High-resolution bathymetric and inner shelf oceanographic data  
? *Sediment budget, residence times*