

## GLOSSARY OF TERMS

| Term                          | Meaning  |
|-------------------------------|--|
| ADCP                          | Acoustic Doppler Current Profiler  |
| ANZECC                        | Australian and New Zealand Environment and Conservation Council  |
| Banner bank                   | A sand bank extending north from Banks Peninsula   |
| Berth pockets                 | Areas next to the wharfs where vessels berth.  |
| BMP                           | Biosecurity management plan  |
| Cashin Quay                   | LPC's wharfs outside and to the east of the Inner Harbour  |
| CDP/Channel Deepening Project | Refers to the deepening, extension and widening of the existing shipping channel, ship-turning basin and berth pockets, as well as on-going maintenance dredging and the removal of seabed material from Te Awaparahi Bay for the construction of the reclamation. |
| CEDA                          | Central Dredging Association (leading independent forum for the professional dredging community in Europe, Africa and the Middle East)   |
| Chart Datum/CD                | Chart datum is the level of water that charted depths displayed on nautical charts are measured from, taken from the lowest astronomical tide  |
| CIA                           | Cultural Impact Assessment   |
| CRMS                          | Craft risk management standard   |
| Design vessel                 | A container vessel approximately 350m long and 43m wide that typically carries 8,000 – 10,000 twenty-foot containers or equivalent units   |
| DMP                           | Dredge Management Plan   |
| Draught                       | Vertical distance from the seawater level down to the lowest point of the vessel   |
| Dredge spoil                  | Sediment removed through dredging  |
| Drogue                        | An older method of measuring ocean currents: buoys with weights which are released from a boat and tracked using a GPS   |
| Ebb tide                      | Outgoing tide  |
| EMMP                          | Environmental Monitoring and Management Plan   |

| <b>Term</b>                                | <b>Meaning</b>  |
|--|---|
| Fairway                                    | The fairway comprises the shipping channel width plus the side-slopes between the channel and the shallower surrounding natural sea bed level |
| Godley Head disposal ground                | 100ha site along the harbour-side of Godley Head to be used as an alternative site for disposing of dredged sediment                          |
| Gyre                                       | A circular ocean current/motion   |
| Hindcast residual/hindcast tidal           | Hindcast modelling refers to the use of historic data to predict what will occur in the future  |
| HMO  | Harmful marine organisms  |
| HS or Hs                                   | Mean significant wave height  |
| IHS  | Import Health Standard  |
| ISQG                                       | Interim Sediment Quality Guidelines   |
| Koukourārata                               | Port Levy   |
| Loess                                      | Fine wind-blown sediment  |
| LPC  | Lyttelton Port Company  |
| Maintenance dredging                       | The ongoing removal of sediment that accumulates over time in the shipping channel, ship-turning basin and berth pockets                      |
| Maintenance spoil                          | Sediment removed during maintenance dredging  |
| MPI  | Ministry for Primary Industries   |
| Navigation width or navigation channel     | Refer to definition of shipping channel   |
| NTCSA                                      | Ngai Tahu Claims Settlement Act 1998  |
| NTU  | A measure of turbidity, referring to Nephelometric Turbidity Units  |
| Channel deepening spoil disposal ground    | Refers to the 1,250ha site located approximately 6km from Godley Head   |
| Offshore maintenance spoil disposal ground | Refers to the 256ha site approximately 2.25km offshore from Godley Head where sediment from maintenance dredging will be disposed             |
| Panamax class                              | Refers to vessels in the 7,000-10,000 twenty-foot equivalent unit range (maximum vessel size expected in New Zealand over                     |

| <b>Term</b>             | <b>Meaning</b>   |
|-------------------------|--|
|                         | the next 30 years)   |
| PIANC                   | World Association for Waterborne Transport Infrastructure (previously known as the Permanent International Association of Navigation Congresses – PIANC)   |
| PRG                     | Peer review group  |
| Reclamation             | The proposed 24ha reclamation in Te Awaparahi Bay, which is yet to be consented  |
| Residual current        | Observed net current speed and direction after subtracting the tidal current   |
| ROMS                    | Regional Ocean Modelling System  |
| Seiche induced currents | Oscillation of a body of water   |
| SELFE                   | Semi-implicit Eulerian-Lagrangian Finite Element (used to model ocean currents and suspended sediment concentration)   |
| Shipping channel        | Colloquial term for the navigation channel. The navigation channel will be 200m wide, with batter slopes on either side (see Figure 2.5). It includes the ship turning basin and berthage areas. |
| Ship-turning basin      | Area where vessels manoeuvre in the vicinity of the Port   |
| Shoaling                | Deformation of waves, which starts when water depth becomes less than about half of the wavelength   |
| SSC                     | Suspended sediment concentration   |
| Stage 1                 | Dredging to a level that allows a vessel with a 14.5 m draught to enter the Port at high tide  |
| TAG                     | Technical advisory group   |
| TEU                     | Twenty-foot equivalent units (referring to shipping containers)  |
| Thalweg                 | Line of maximum Harbour depth  |
| Tidal ellipse           | These show the general direction and strength of the tide  |
| TSHD                    | Trailer suction hopper dredge  |
| Volume                  | Refers to in situ (or 'in the ground') volume unless otherwise specified   |
| Wave period             | Time between the crests of waves   |

| <b>Term</b>   | <b>Meaning</b>                          |
|---------------|---|
| Wave spectrum | Distribution of energy with wave period |
| Whakaraupō    | Lyttelton Harbour                       |