

Dredging Downstream of Hansen Park

- Until the mid-1980s, dredging was undertaken along the Ōpāwaho/Heathcote River, managed by the Christchurch Drainage Board.

- No systematic dredging has been undertaken since 1989, although silt removal has occurred in sections along the river.

- Ongoing studies into floodplain management and dredging have made it clear that the siltation of the channel has increased frequent flood levels, particularly downstream of Hansen Park.

- Dredging can increase channel conveyance, reducing water levels and impact of frequent floods. Dredging can also reduce the length of time water occupies the floodplain, which has relevance where flooding displaces people from their homes or forces road closure and access restrictions.

- Dredging provides benefit in frequent events (for example a 10 year ARI*), but less so in extreme events (for example a 50 yr ARI*).

- Over time with rising sea levels, the benefit provided by dredging will reduce.

- Dredging of the Woolston Cut, an engineered channel, is starting early 2018.

- Before dredging in the natural channel there are technical, environmental and cultural challenges to overcome, such as:

- Stability of banks once dredging occurs
- Possibility of contaminated sediment

- Impact on river ecology

- Ensuring minimal discharge of sediment downstream into the estuary

- The cost is currently estimated at \$14 million, with likely ongoing costs of \$1 - 2 million every 10 years.

*ARI - Average Recurrence Interval



Silt removal in the Heathcote River.



Silt deposits in the river.

