

Next Generation Project Consultative Group

Notes from the meeting held on Monday 25 August 2008, 7pm
Port Otago Limited Building, Port Chalmers.

In Attendance: Alan Sutherland (POL)
Bert Youngman (Otago Yacht Club)
Bill Lloyd (Port Environment Liaison Committee),
Bradley Curnow (Aramoana Conservation Group)
Brendan Flack (East Otago Taiapure Management Committee)
Brett Hastie (South Coast Board Riders)
Bruce Hill (DOC)
Carol Meikle (Port Environment Liaison Committee),
Cheryl Adams (Blueskin Road resident),
Chris Hepburn (East Otago Taiapure Management Committee)
Craig Muir (POL)
David O'Malley (Octa Associates Ltd),
David Bradshaw (Southern Clams Ltd)
Graeme Burns (Harrington Point Community Society),
Graeme Carse (Quarry Beach Surf Boards)
Irene Scurr (Otago Peninsula Community Board),
Joan Conway (Port Environment Liaison Committee),
John Milburn (Monarch Wildlife Cruises)
John Perry (Port Environment Liaison Committee),
Lincoln Coe (Port Otago),
Mark James (NIWA),
Peter Brown (Port Otago),
Selva Selvarajah (Otago Regional Council)
Stephen Higgs (in the Chair)

Apologies: Geoff Plunket (Port Otago), Artie Heineman (Port Chalmers Fishermen's Co-op), John Christie (Otago Chamber of Commerce), Phil Mitchell, Martin Single (University of Canterbury), Roger Belton (Southern Clams), Robert Watt, David McFarlane (Yellow-Eyed Penguin Trust), Trevor Johnson (Chalmers Community Board), Mark James (for lateness)

1. Welcome/Introductions

Several new members/attendees were introduced to the group – Bradley Curnow (Aramoana Conservation Group), Brendan Flack and Chris Hepburn (East Otago Taiapure Management Committee), Alan Sutherland and Craig Muir (Port Otago).

2. Apologies

The apologies for the meeting were confirmed.

3. Confirmation of Agenda

The agenda, which had been circulated with the notes of the previous meeting, was confirmed.

4. Confirmation of Notes from 30 June 2008 meeting

The minutes of the previous meeting of 30 June 2008 were accepted subject to the following amendments:

Bill Lloyd's apology was not recorded.

David Bradshaw (Southern Clams) had been recorded as David Redshaw

Page 2: Southern Clams *not* Southern Claims.

5. Matters arising

Stephen Higgs asked about the traffic report mentioned in the last notes. Lincoln Coe said the traffic report is being reviewed with further information sought. The final report is expected back shortly.

It was agreed to discuss any other matters not dealt with in subsequent agenda items at the end of the meeting.

6. Update on meetings since 30 June

Lincoln advised that there had been no stakeholder meetings since the last meeting.

7. Presentations on project progress

7.1 Geotechnical investigations, Channel design and dredging methodology (Lincoln Coe)

A copy of this presentation is attached to these notes and will be made available on the website.

Lincoln reviewed the ship simulation and design work. The channel design will be resolved over the next month. John Milburn asked about Harrington Bend and concerns with 4100s going around this corner. He asked what the effect of a 6000 TEU ship was and whether there were manoeuvrability issues. Lincoln advised that vessel speed is an issue. On the simulation runs, the larger vessel needed to maintain similar speeds (to 4100s) for manoeuvrability. The modelling work demonstrated that some adjustment to Harrington Bend is required.

Lincoln then moved on to the slides showing the geotechnical investigations that were undertaken. An explanation of the bore holes and vibro-coring methodology was provided. John Milburn asked about the rock type that was encountered. Lincoln said it was highly weathered basalt that become less weathered further away from the surface.

Lincoln then moved on to dredging methodology and showed some videos of possible vessels and the dredging cycle. The New Era is a useful vessel for maintenance but would require a significant time to undertake the proposed capital dredging. An 8,000 to 10,000m³ dredge would be the likely size of the vessel. Larger dredging vessels would find it difficult to use the existing channel.

A "trailing suction hopper dredge" would be likely used for sand and silt areas. The overflow would be via a "green valve" in the vessel keel. In sands the discharge overflow water would continue to discharge until the hopper was full. For silt, the hopper would fill to overflow more quickly and then stop. The dredge would take the material to the disposal site.

Allan Sutherland described dredging at Lyttelton using the New Era. Dredging silt is a 30min cycle compared to 2 hours when dredging for sand in the Port Chalmers channel.

Bert Youngman asked what the average load in the dredge would be. Allan Sutherland said that, for sand, the New Era holds around 600m³ to 800m³. However for silt the volume reduces to around 300m³ in 800m³.

Mark James arrived at 7.45pm.

Allan Sutherland said that distance to the disposal site is a key issue, especially for silt, where there is less volume able to be dredged per load. David Bradshaw asked about the material being overflowed. Lincoln said that in larger vessels there is an adjustable chute so it is easy to control overflow. Allan Sutherland said overflow from sand does typically have some finer material within it.

Bruce Hill asked about handling of the large dredge. Lincoln Coe said that these specialist vessels are usually very manoeuvrable. The larger vessels have bow thrusters so accurate positioning is possible. Also, as they are larger they are able to handle larger seas than the New Era. When fully laden, these vessel travel at around 9 knots.

Lincoln Coe then moved on to rock removal and showed a video of a platform mounted backhoe. Heron Dredging has a suitable platform mounted excavator. They have indicated that, based on the geotechnical investigation, blasting will likely be required.

Allan Sutherland referred to the Beach Street basin where the basin was deepened using blasting. This would be a similar operation. Goat Island channel was also widened using blasting in 1960s.

Bert Youngman asked about the percentage of rock versus sand/silt. Lincoln Coe said, as a percentage, over 95% of material would be sand/silt. John Milburn asked about channel maintenance after dredging was completed and whether there were issues with mobility of the channel sides. It is proposed that the channel sides would be dredged along with the base. This would reduce maintenance. Allan said that the volume calculation assumes dredging of the sides.

Bert Youngman asked about the dredge draft and the reach of the suction head. Lincoln Coe said that it has a 9m laden draft and could dredge to the required depths. The New Era would require modifying to provide a longer trail-pipe.

Irene Scurr asked about disposal of silt and whether, when excavating sand, there will be some silt in the overflow discharge that will create a plume. Lincoln Coe said that this is correct. The sediment disposal and plume are being modelled. There is no contaminated material identified in the research to date.

The risk of smothering was also raised. Lincoln advised that Rob Bell was modelling sediment transportation and that Mark James was looking at the ecological impact of this. Mark confirmed the modelling was looking at material type, extent of silt and environmental effect.

7.2 Ecology Presentation – Mark James (Niwa)

A copy of this presentation is attached to these notes and will be made available on the website.

Mark advised the PCG that reports on fisheries, birds and ecological aspects would be available in the next two to three weeks. John Milburn asked about the origin of the organic material indicated in one of the presentation slides. Mark said that it is likely to have come from the harbour, although it could be from a range of sources.

A question was asked about studies of reef systems nearer Karitane and whether any research had been undertaken. Mark said that the studies he has done are more offshore studies concerned with avoiding sediment going into Blueskin Bay. The modelling results to date are showing no material going on to these reefs, therefore there is unlikely to be an issue.

Mark noted that there are now two turbidity meters in the harbour to provide background information. Brendan Flack asked whether there would be any further focus on the northern kelp beds. Mark replied that the next stage is to look at the residuals of modelling.

Chris Hepburn noted that there are turbidity measures available for the rock beds. Mark said that he would investigate what information is available on the rock areas and noted he already had information on Bryns Point.

John Milburn said that presumably the natural climatic impacts would be considered in context with any capital dredging. For example, the recent high rainfall had put a large amount of sediment into the harbour. Mark confirmed this was the reason for the turbidity

meters so an understanding of the background turbidity could be gained. Mark said that turbidity data would be used to provide context to dredging effects.

8. General Business

Bert Youngman asked about the recent announcement from Maersk, reducing cargo volumes into Port Chalmers, and whether this would have any impact on the Next Generation Project. Lincoln advised that this was a 25-year project and the intention is to proceed with the investigation of the channel deepening on the same timeframe as previously proposed.

Bradley Curnow requested a visit by project members to Aramoana to provide information to the local community. Lincoln advised that with the availability of the science reports more consultation was due to commence in the near future.

9. Next Meeting

Lincoln said that there was the intention to release a number of reports before the next meeting, which was tentatively set down for 22 September. It was proposed that this date be finalised based on availability of new and final reports.

10. Closure

The meeting closed at 8.55pm.