Dunedin 3 Waters Strategy

Ravensbourne Road Integrated Catchment Management Plan

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RAVENSBOURNE ROAD INTEGRATED CATCHMENT MANAGEMENT PLAN

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Figure 4-1

Ravensbourne Road Catchment Location
RAVENSBOURNE ROAD INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 4-2
Ravensbourne Road Catchment Contour Map

Legend

\[\begin{align*}
\text{Ravensbourne Road Catchment Boundary} \\
\text{Contour (m)} \\
<35 \\
35 - 75 \\
76 - 110 \\
111 - 150 \\
150 - 190
\end{align*}\]

Dunedin 3 Waters Strategy

DISCIPLINE
Stormwater

Drawn: KC
Checked: HES
Approved: SDH
Scale: 1:5,000
Plot Date: July 2010
Map No: 42173227
Revision: -
RAVENSBOURNE ROAD INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 4-3

Ravensbourne Road Catchment Geology Map

DISCIPLINE
Stormwater

Legend
- Ravensbourne Catchment Boundary
- Mdc
- Q1af
- Q1an
- Q1b
- Q5af
- Q5b
- Q2af
- Md3e
- Md2e
- Md1e
- Mo
- Water
- Roads

0 0.15 0.3 Kilometres

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Figure 4-3

 angels

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Figure 4-4
Ravensbourne Road Catchment Land Use Zones

Legend

- Ravensbourne Road Catchment Boundary
- Land Parcels

District Plan Zones

Subzone

- CENTRAL ACTIVITY AREA
- CAMPUS
- INDUSTRIAL 1
- INDUSTRIAL 2
- LARGE SCALE RETAIL ZONE
- LOCAL ACTIVITY ZONE 1
- LOCAL ACTIVITY ZONE 2
- PORT 1
- PORT 2
- RESIDENTIAL 1
- RESIDENTIAL 2
- RESIDENTIAL 3
- RESIDENTIAL 4
- RESIDENTIAL 5
- RESIDENTIAL 6
- RESIDENTIAL 6A
- RURAL RESIDENTIAL
- RURAL
- SPECIAL DEVELOPMENT

Otago Harbour
RAVENSBORNE ROAD INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 4-5
Ravensbourne Road Catchment Recent Consents and Designations

Legend

Ravensbourne Road Catchment Boundary

Consents

- Other Consents
- Land Use Change
- Building Consent
- Stormwater Network
- Main Roads
- District Plan Designation
RAVENSBOURNE INTEGRATED CATCHMENT MANAGEMENT PLAN

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FIGURE 4-6
CONTAMINATED LAND SITES WITHIN THE CATCHMENT

Legend
- Catchment Boundary
- Stormwater Network
- Road
- Parcel Boundary
- Contaminated Site
- Landfill
- Reclamation
- Reclaimed Land
- ORC Contaminated Sites

Discipline: Stormwater
RAVENSBOURNE ROAD INTEGRATED CATCHMENT MANAGEMENT PLAN
Figure 4-7
Ravensbourne Road Catchment Current Imperviousness

Legend
- Ravensbourne Road Catchment Boundary
- Land Parcels

Current Land Use Imperviousness
Impervious (%)
- 0.0 - 20
- 20.1 - 40
- 40.1 - 60
- 60.1 - 80
- 80.1 - 100

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HES
SDH

±
RAVENSBOURNE ROAD INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 4-9
Ravensborne Road Catchment Pipe Network Ages

DISCIPLINE
Stormwater

Legend
- Ravensbourne Road Catchment Boundary
- Land Parcels

Pipe Renewal
Installation Year
- Installed Before 1900
- Installed 1901 - 1920
- Installed 1921 - 1940
- Installed 1941 - 1960
- Installed 1961 - 1980
- Installed 1981 - 2000
- Installed 2001 - 2010
- Coastline

Dunedin 3 Waters Strategy
Figure 4-11
Ravensbourne Road Wastewater Flooding Complaints

Legend

- Ravensbourne Road Catchment Boundary
- Land Parcels

Wastewater Complaints

Exact Address Unknown (Road Name Only)

Problem Description
- FOUL DRAIN - BOUNDARY TRAP OVERFLOW
- FOUL SEWER - BLOCKED
- FOUL SEWER - BROKEN
- FOUL SEWER - COLLAPSED
- FOUL SEWER - COMPLAINT - SERVICE OTHER
- FOUL SEWER - DRAIN GULLY TRAP OVERFLOW
- FOUL SEWER - OVERFLOWING
- FOUL SEWER - PROBLEM OTHER
- FOUL SEWER MANHOLE - OVERFLOWING
- FOUL SEWER PUMP STATION - OVERFLOWING

Exact Address Known (Full Address)

Problem Description
- Foul Drain - Boundary Trap Overflow
- Foul Sewer - Blocked
- Foul Sewer - Broken
- Foul Sewer - Collapsed
- Foul Sewer - Complaint - Service Other
- Foul Sewer - Drain Gully Trap Overflow
- Foul Sewer - Overflowing
- Foul Sewer - Problem, Other
- Foul Sewer - Lamphole Overflowing
- Foul Sewer - Manhole Overflowing
- Foul Sewer - Overflowing Inside My House
- Foul Sewer - Pump Station Overflowing

Year
- 2006
- 2007
- 2008
- 2009
- 2010

Figure 4-11
RAVENSBOURNE ROAD INTEGRATED CATCHMENT MANAGEMENT PLAN
Dunedin Three Waters Strategy
Ravensbourne Road Wastewater Flooding Complaints

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0 0.125 0.25 Kilometres
RAVENSBOURNE ROAD INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 4-12
Ravensbourne Road Catchment Three Waters Network

Legend
- Ravensbourne Road Catchment Stormwater Outfalls
- Stormwater Pipe
- Water Supply
- Wastewater
- Ravensbourne Road Catchment Boundary

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RAVENSBOURNE ROAD INTEGRATED CATCHMENT MANAGEMENT PLAN
Figure 4-12
Ravensbourne Road Catchment Three Waters Network

DISCIPLINE
Stormwater

Drawn: KC
Checked: HES
Approved: SDH

Map No: 42173272
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0 0.1 0.2 Kilometres

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Figure 5-1
Ravensbourne Road Catchment Marine Receiving Environment

Legend
Outfalls
- Other Consented Outfalls
- Ravensbourne Road

DISCIPLINE
Stormwater

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RAVENSBOURNE ROAD INTEGRATED CATCHMENT MANAGEMENT PLAN

FIGURE 7-1
MODEL EXTENT

Legend
- Ravensbourne Road Catchment Boundary
- Modelled Manhole
- Pruned Manhole (Not Modelled)
- Drain Manhole (Not Modelled)
- Catchpits
- Modelled Pipe
- Pruned Pipe (Not Modelled)
- Drain Pipe (Not Modelled)
- Catchpit Pipe
- Roads

Dunedin Three Waters Strategy

Stormwater
RAVENSBOURNE ROAD INTEGRATED CATCHMENT MANAGEMENT PLAN

Dunedin 3 Waters Strategy

Figure 9-1

Ravensbourne Road Catchment Issues

**Legend**
- Ravensbourne Road Catchment Boundary
- Land Parcels
- Stormwater Network
- Ravensbourne Road Catchment Outfalls

**DISCLAIMER:** Whilst we have attempted to produce mapping that is as reliable as possible, Dunedin City Council and its consultants (Opus / URS) accept no responsibility for the accuracy of the mapping, nor any decisions made based on it. The mapping was prepared for strategic planning purposes only. It indicates the predicted likelihood of flooding from stormwater reticulation for defined areas, based on the best available information at the time of preparation and is subject to uncertainty. The mapping is not sufficiently detailed to account for individual properties, as individual properties may be subject to local factors not considered in the modelling.

**Flood Depth - Worst Case 1 in 100 yr ARI Rainfall**
- 50 - 100 mm
- 100 - 200 mm
- 200 - 300 mm
- > 300 mm

**Future Flood Hazard (Extreme Event)**
- Limited Confidence in Knowledge of Effects on the Otago Harbour Environment
- Nuisance flooding
- Low Level of Service
- High variability of stormwater quality results
- Ongoing stormwater discharge