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CONTRACT No 3206
20 September 2011
ST CLAIR INTEGRATED CATCHMENT MANAGEMENT PLAN

Dunedin 3 Waters Strategy

Figure 4-1
St Clair Catchment Location

DISCIPLINE
Stormwater

ST CLAIR INTG CATCHMENT LOCATION

0 0.5 1 Kilometres

± ±
Legend

- St Clair Catchment Boundary
- Contour (m)
  - <30
  - 30 - 70
  - 71 - 110
  - 111 - 140
  - >140

ST CLAIR INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 4-2
St Clair Catchment Contour Map

Dunedin 3 Waters Strategy

DISCIPLINE
Stormwater

Status: Final
Scale: 1:6,500
Stamp Date: Sep 2011
Drawn By: CO
Approved: HS
Checked: JH
Date: Sep 2011
Job No: 42173227
Map No: Figure 4-2
Revision:

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Legend
- St Clair Catchment Boundary
- Mdc
- Q1al
- Q1an
- Q1b
- Q5al
- Q5b
- Q2af
- Md3e
- Md2e
- Md1e
- Mo
- Water
- Roads

ST CLAIR INTEGRATED CATCHMENT MANAGEMENT PLAN
Figure 4-3
St Clair Catchment Geology Map

DISCIPLINE
Stormwater

Dunedin 3 Waters Strategy

Status: Final
Scale: 1:6,500
Plot Date: Sep 2011
Drawn By: HS
Approved: HS
Checked: JH
Date: Sep 2011
Job No: 42173227
Map No: Figure 4-3
Revision: -
Legend
- St Clair Catchment Boundary
- DP Heritage Structure
- DP Archaeological Sites
- DP Heritage Facade
- DP Townscape and Heritage Precinct
- Land Parcels
Legend

- St Clair Catchment Boundary
- Land Parcel

Current Land Use Imperviousness

Impervious (%)
- 0 - 20
- 20.1 - 40
- 40.1 - 60
- 60.1 - 80
- 80.1 - 100

ST CLAIR INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 4-8
St Clair Catchment
Current Imperviousness

DISCIPLINE
Stormwater

Status: Final
Scale: 1:6,500
Plot Date: Sep 2011
Drawn By: CO
Approved: HS
Checked: JH
Date: Sep 2011
Job No: 42173227
Map No: Figure 4-8
Revision: -
Legend
- St Clair Catchment Boundary
- Land Parcels

Stormwater Flooding Complaints

Year
- Undated
- 2015
- 2016
- 2017
- 2018
- 2019
- 2020

Exact Location Known (Full Address)
Problem Description
- Complaint
- Floodgate Outlet Damaged
- Pollution Spill
- Stormwater Channel Screen Blocked
- Stormwater Channel Screen Damaged
- Stormwater Overflowing - Into my basement or garage
- Stormwater Overflowing - Onto my property
- Drain - Boundary trap overflow
- Lamphole - Overflowing
- Sewer Blocked
- Sewer Collapsed
- Sewer Leaking
- Sewer Overflowing
- Sewer Manhole - Overflowing

Exact Location Unknown (Road Name Only)
Problem Description
- Complaint
- Stormwater Channel Screen Blocked
- Stormwater Channel Screen Damaged
- Stormwater Overflowing - Into my basement or garage
- Stormwater Overflowing - Onto my property
- Sewer Blocked
- Sewer Collapsed
- Sewer Leaking
- Sewer Overflowing
- Sewer Manhole - Overflowing

ST CLAIR INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 4-13

Dunedin 3 Waters Strategy

St Clair Catchment
Reported Stormwater Flooding

DISCIPLINE
Stormwater
Dunedin 3 Waters Strategy

ST CLAIR INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 4-14
St Clair Catchment Reported Wastewater Flooding

DISCIPLINE
Stormwater

Status: Final
Scale: 1:6,500
Plot Date: Sep 2011

Drawn By: CO
Approved: HS

Checked: JH
Date: Sep 2011

Job No: 42173227
Map No: Figure 4-14
Revision: 

Legend

St Clair Catchment Boundary
Land Parcels
Wastewater Complaints

Year

● 2006
● 2007
△ 2008
■ 2009
■ 2010

Exact Location 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 - Lampbox Overflowing
● Foul Sewer - Overflowing inside My House
● Foul Sewer - Furry Station Overflowing

Exact Location Unknown (Road Name Only)
Problem Description

ST CLAIR INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 4-14
St Clair Catchment Reported Wastewater Flooding

DISCIPLINE
Stormwater

Status: Final
Scale: 1:6,500
Plot Date: Sep 2011

Drawn By: CO
Approved: HS

Checked: JH
Date: Sep 2011

Job No: 42173227
Map No: Figure 4-14
Revision: 

Legend

St Clair Catchment Boundary
Land Parcels
Wastewater Complaints

Year

● 2006
● 2007
△ 2008
■ 2009
■ 2010

Exact Location 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 - Lampbox Overflowing
● Foul Sewer - Overflowing inside My House
● Foul Sewer - Furry Station Overflowing

Exact Location 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
ST CLAIR INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 4-15
St Clair Catchment
Three Waters Networks

DISCIPLINE
Stormwater

Dunedin 3 Waters Strategy

Legend
- St Clair Catchment Stormwater Outfalls
- Stormwater Pipe
- Water Mains: 300 plus
- Water Supply
- Wastewater
- St Clair Catchment Boundary
ST CLAIR INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 5-3
St Clair Catchment Marine Receiving Environment

Legend
Outfalls

- Other Outfalls
- St Clair Catchment Outfalls

Dunedin 3 Waters Strategy

St Clair Catchment Marine Receiving Environment

DISCIPLINE
Stormwater

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ST CLAIR INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 9-1
St Clair Catchment Issues

Dunedin 3 Waters Strategy

DISCIPLINE
Stormwater

ST CLAIR INTEGRATED CATCHMENT MANAGEMENT PLAN

Figure 9-1
St Clair Catchment Issues

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.

Legend

- St Clair Catchment Boundary
- Land Parcels
- Open Channel
- Stormwater Pipes
- St Clair Catchment Outfalls

Flood Depth - Worst Case 1 in 100 yr ARI Rainfall

- 50 - 100 mm
- 100 - 200 mm
- 200 - 300 mm
- > 300 mm

Network maintenance

Cross-connection with South Dunedin stormwater network

Nuisance flooding

Overland flow to South Dunedin catchment

Deep flooding

Low level of service in lower catchment

Flood hazard

Potential wastewater contamination

Ongoing stormwater discharge