

prepared by brayd consulting
August 2015

**DOMESTIC WASTEWATER
MANAGEMENT PLAN
BACKGROUND REPORT
ATTACHMENTS – PART 1**



Document Information

Prepared by: Dawn Bray, BA Applied Science (Planning), MPIA, brayd consulting
ABN 829 8571 0259

Prepared for: Steven Hicks
Manager Governance and Statutory Services
Strathbogie Shire Council

Name of Project: Strathbogie Shire Domestic Wastewater Management Plan

Acknowledgements:

Brayd Consulting would like to acknowledge the contribution of Steven Hicks (SSC), Fiona Spencer (SSC), Avril Young (SSC), Alan Tyson (Goulburn Valley Water), John Xu (Goulburn Valley Water), Neil Repacholi (Goulburn Murray Water), Robert Graves (Mansfield Shire Council) and all of our online survey respondents in the preparation of this document.

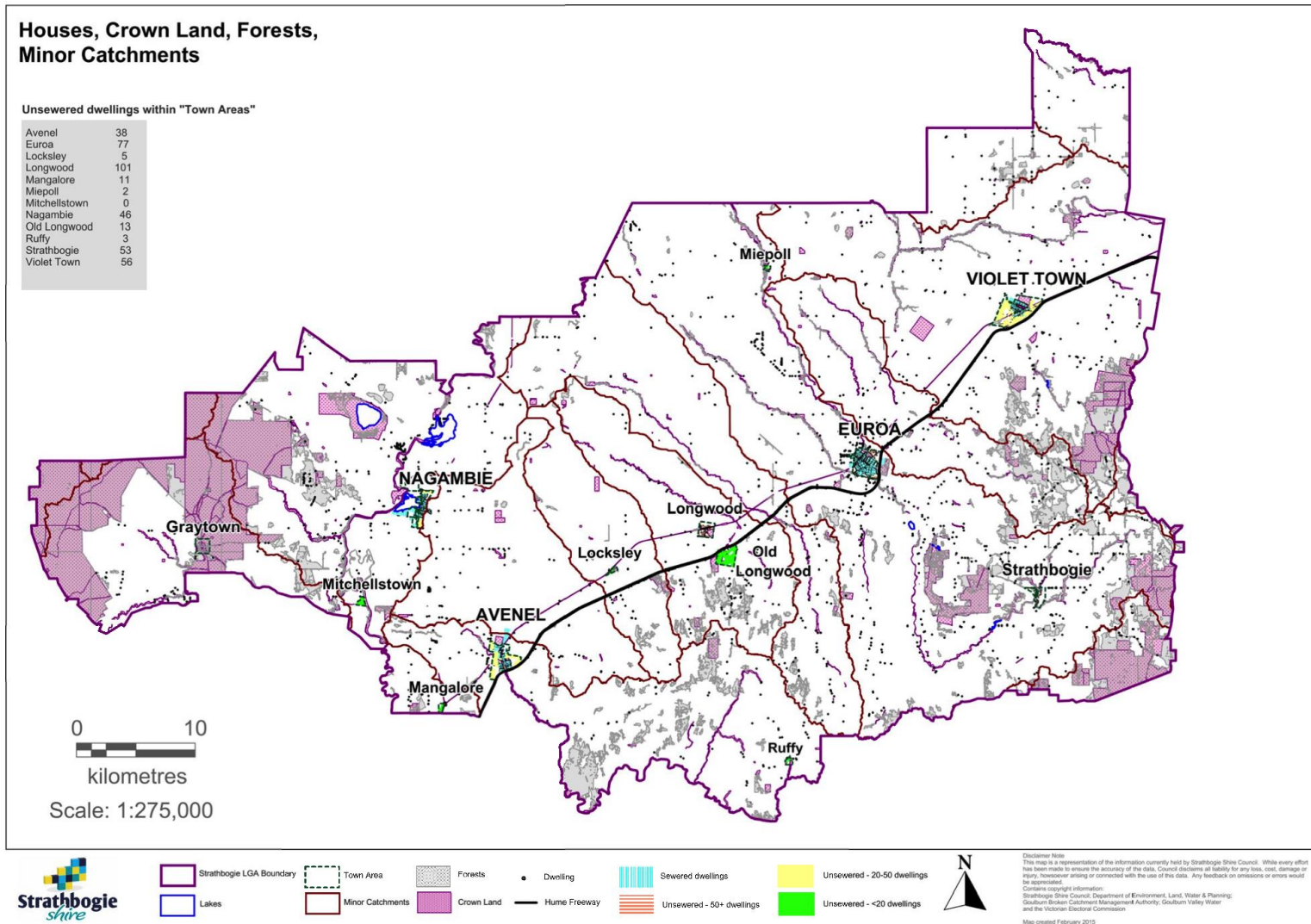
Version	Date	Reviewed by	Approved by	Date
1.0	5 May 2015	Steven Hicks, SSC Alan Tyson, GVW Neil Repacholi, GMW	Steven Hicks SCC	31 May 2015
1.1	14 August 2015	Dawn Bray	Steven Hicks SCC	14 August 2015

Table of Contents

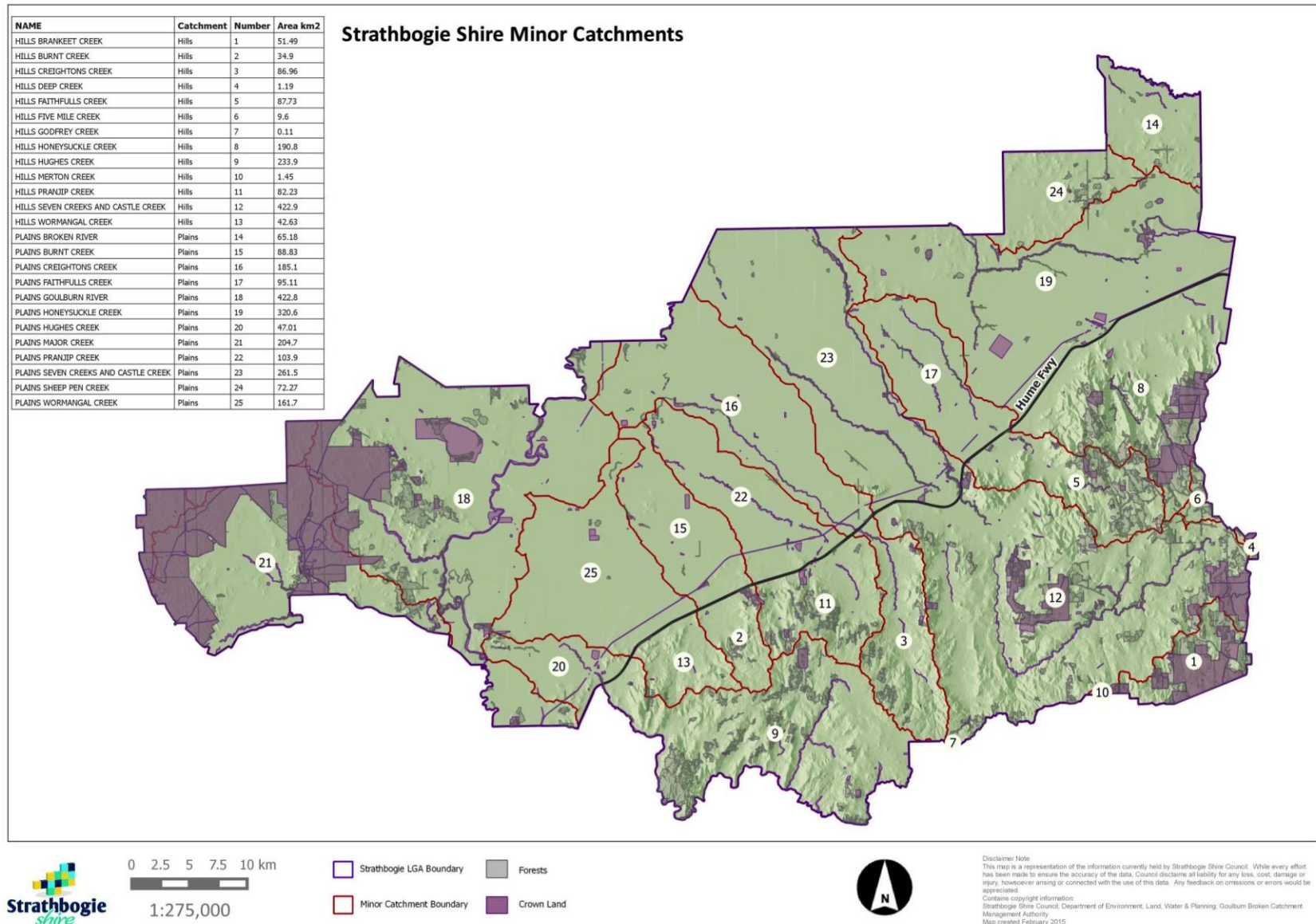
15.	Attachments – Part 1 (this document)	
1A	Strathbogie Shire Overview Map	3
1B	Minor Catchments within Strathbogie Shire	4
2	Strathbogie Planning Scheme Zoning Map of the Shire	5
3	Map of the Floodway Overlay and Land Subject to Inundation Overlay	6
4	Map of the Erosion Management Overlay	7
5	Metrics for River Condition Rating, Index of Stream Condition – The Third Benchmark of Condition Report 2012	8
6	GVW Offtake Points and Potable Reservoirs	9
7	Location of Existing Onsite Domestic Wastewater Management Systems	10
8A	Waterbody and Potable Water Asset Risk Map	11
8B	Slope Risk Map	12
8C	Soil Risk Map	13
15.	Attachments – Part 2 (see separate document)	
9	Online Survey Templates for Residents / Land Owners, Land Capability Experts and Plumbers / Service Technicians	3
16.	References – Part 2 (see separate document)	31

15. Attachments

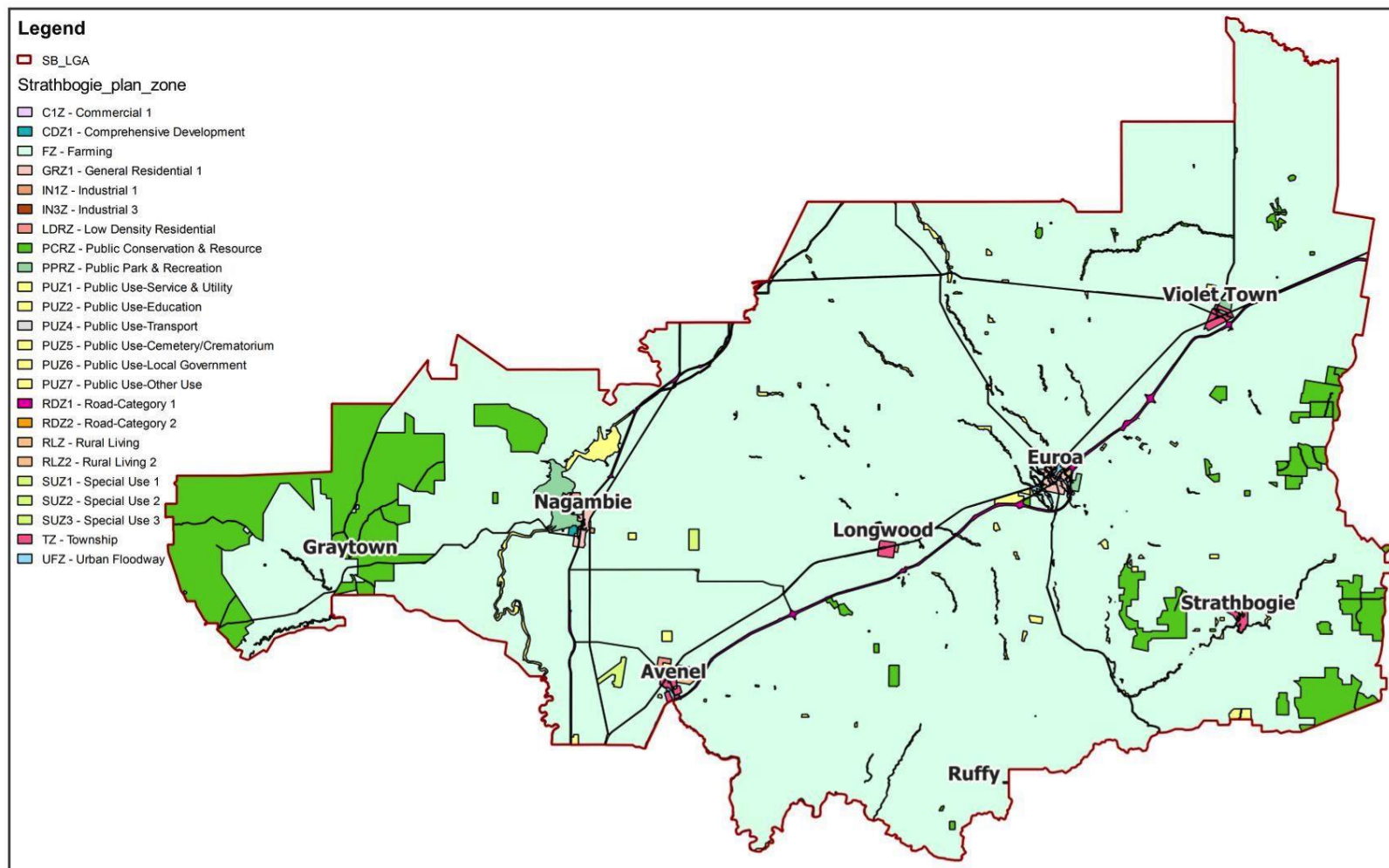
Attachment 1A – Strathbogie Shire Overview Map



Attachment 1B – Minor Catchments Within Strathbogie Shire



Attachment 2 – Strathbogie Planning Scheme Map



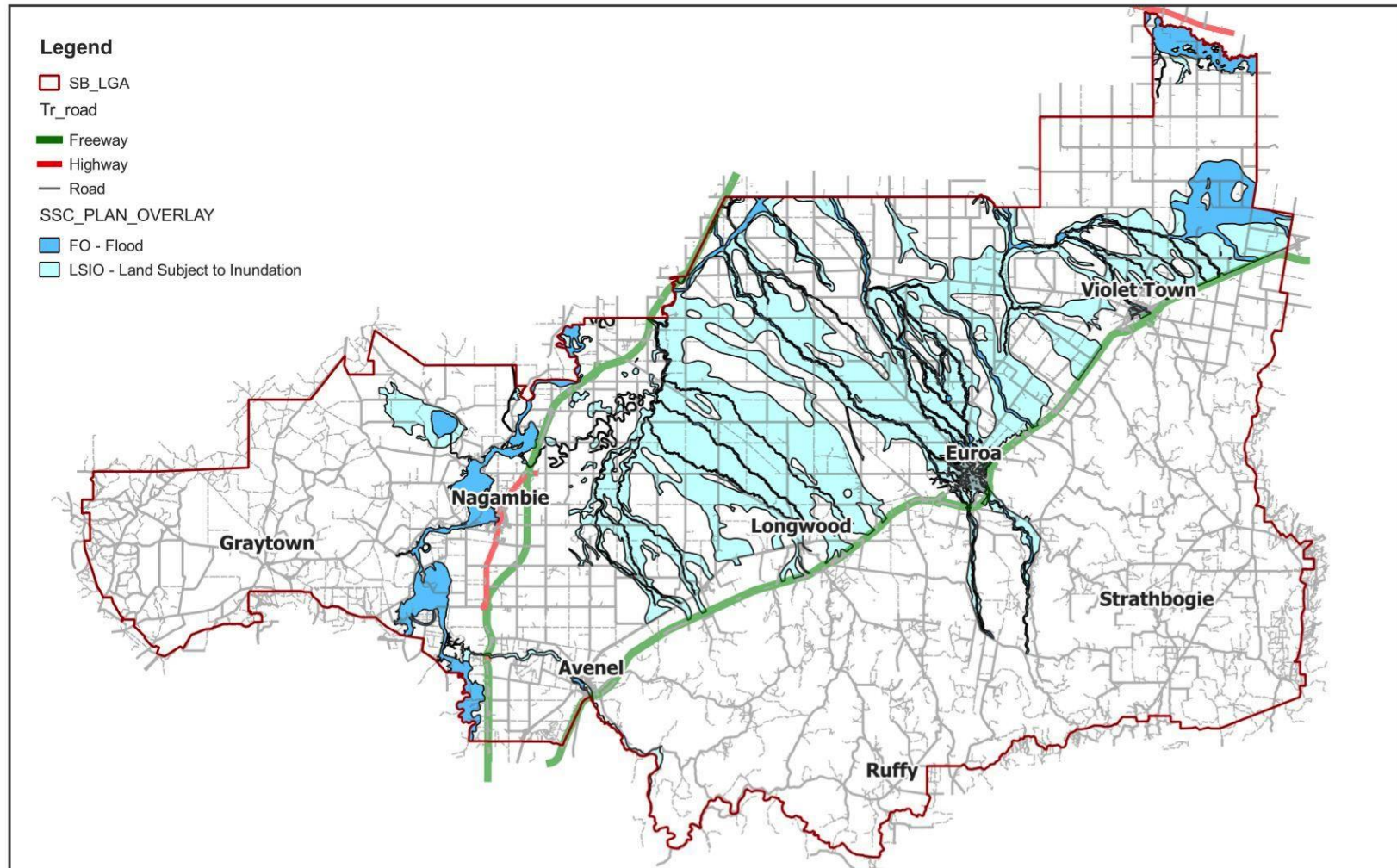
STRATHBOGIE SHIRE PLANNING ZONES

Date created 21/01/2015
Prepared by: SSC GIS Department



Disclaimer Note:
This map is a representation of the information currently held by Strathbogie Shire Council. While every effort has been made to ensure the accuracy of the data, Council disclaims all liability for any loss, cost, damage or injury, however arising or connected with the use of this data. Any feedback on omissions or errors would be appreciated.
Contains Council Information © Strathbogie Shire Council
Contains Vicmap Information © State of Victoria, Department of Environment, Land, Water & Planning

Attachment 3 – Map of the Floodway Overlay and Land Subject to Inundation Overlay



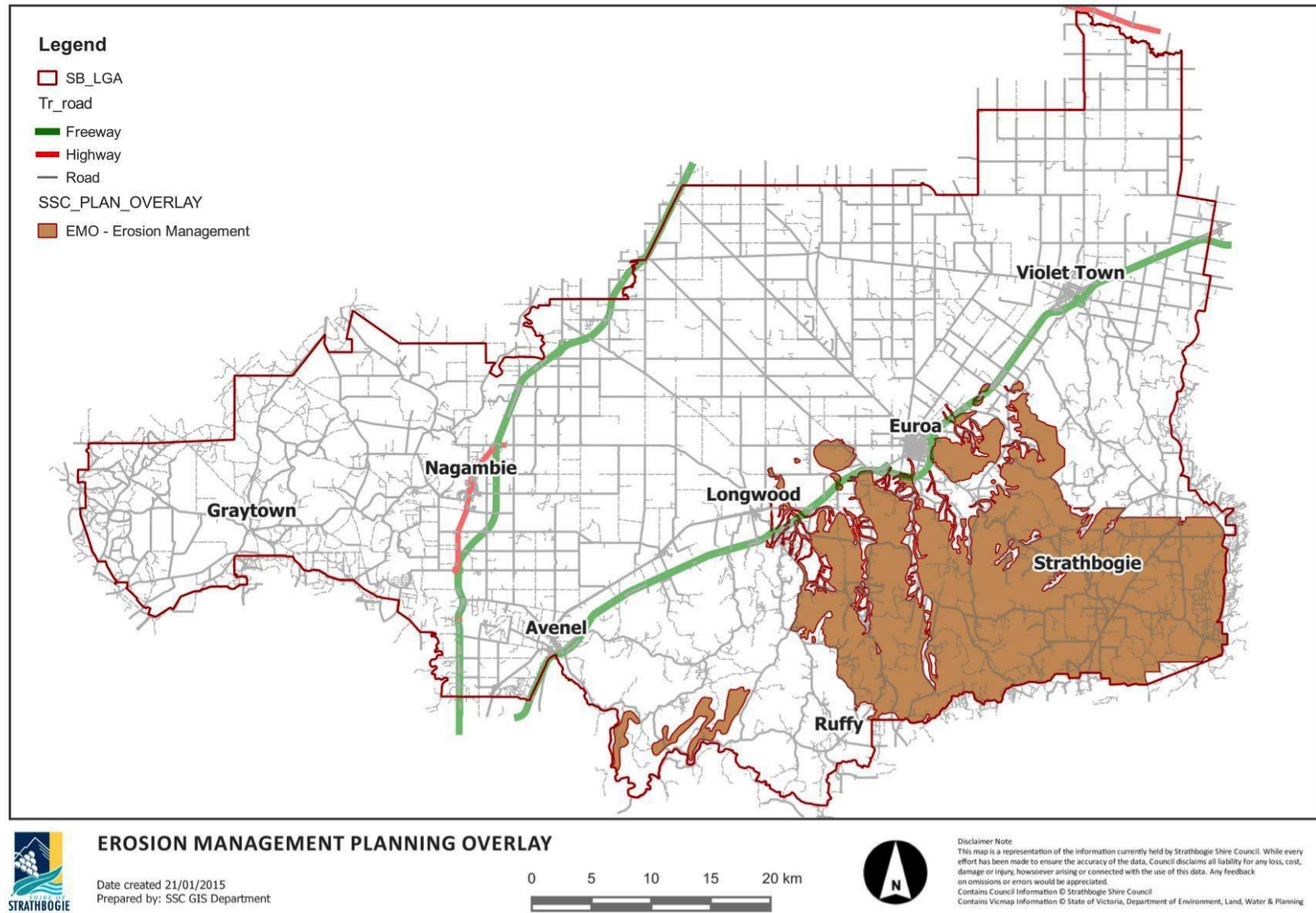
FLOOD AND LAND SUBJECT TO INUNDATION PLANNING OVERLAYS

Date created 21/01/2015
Prepared by: SSC GIS Department



Disclaimer Note
This map is a representation of the information currently held by Strathbogie Shire Council. While every effort has been made to ensure the accuracy of the data, Council disclaims all liability for any loss, cost, damage or injury, however arising or connected with the use of this data. Any feedback on omissions or errors would be appreciated.
Contains Council Information © Strathbogie Shire Council
Contains Vicmap Information © State of Victoria, Department of Environment, Land, Water & Planning

Attachment 4 – Map of the Erosion Management Overlay

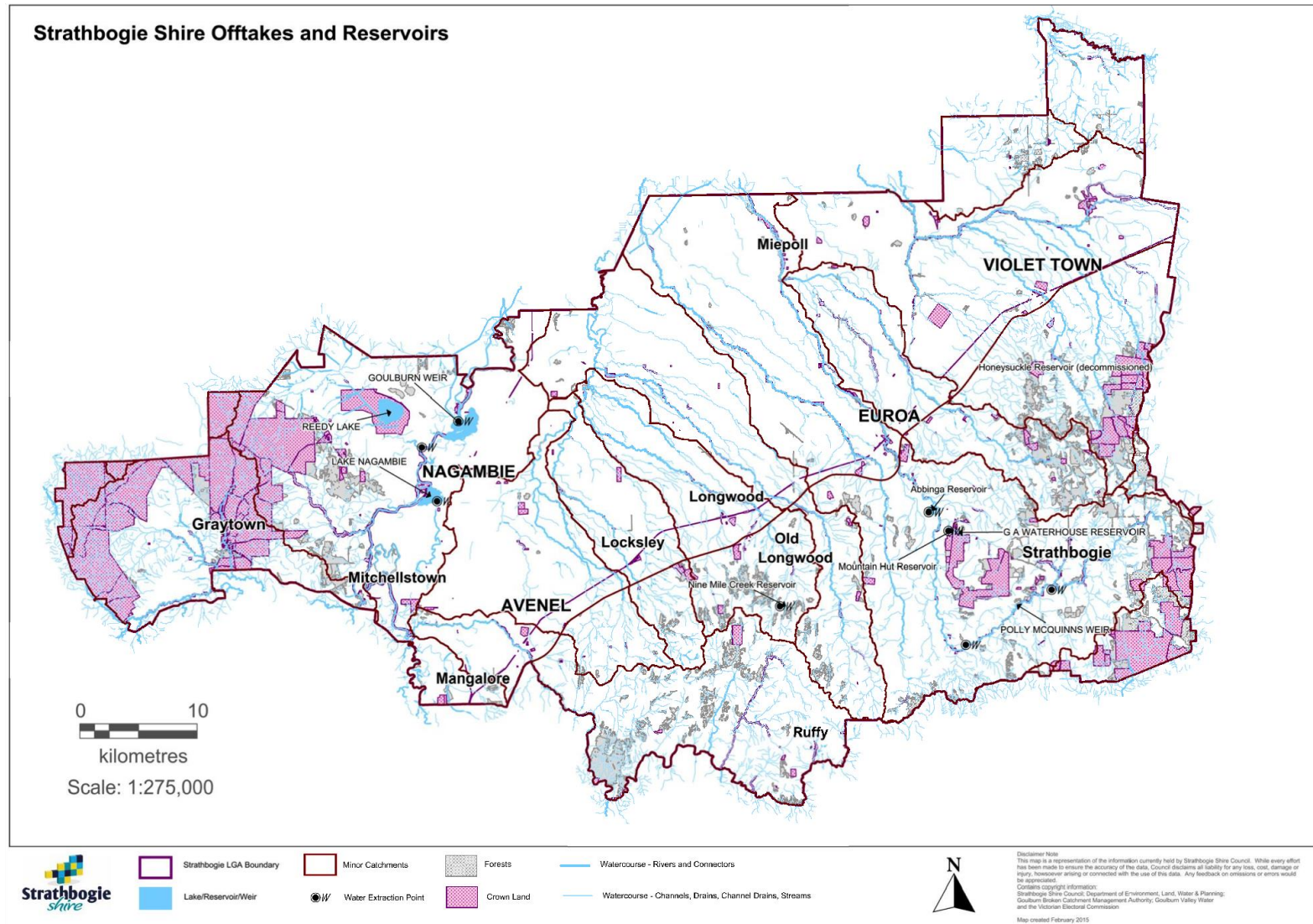


Attachment 5 – Metrics for River Condition Rating – Index of Stream Condition – The Third Benchmark of Condition Report 2012

2010 Index of Stream Condition metrics

Metric	Meaning
Hydrology sub-index	
Low flow	The two lowest monthly flows in a year
High flow	The two highest monthly flows in a year
Zero flow	The period of time that there is no flow
Seasonality	A measure of the shift in the timing of the maximum flow month and the minimum flow month
Variability	The difference in magnitude between the high and low flows within each year
Physical Form sub-index	
Bank condition	An assessment of the level of erosion/ instability on the bank face and whether it is above what is expected for the type of stream
Artificial barriers	Artificially constructed weirs and dams
Instream woody habitat	A tree, branch or root system that has fallen into a stream. Often referred to as 'snags'
Streamside Zone sub-index	
Width	Width of woody vegetation along the river
Fragmentation	A measure of the amount of gaps where there is no woody vegetation
Overhang	Percentage of the stream bank that has overhanging vegetation
Cover of trees and shrubs	The amount of vegetative cover in the shrub layer (<5 m in height) and tree layer (>5 m in height)
Structure	The amount of vegetative cover in 5 m height intervals
Large trees	Older mature trees that are larger than a prescribed diameter (usually 80 cm)
Weeds	The percentage cover of Willows and Hawthorn in the tree layer
Water Quality sub-index	
Total Phosphorus	The sum of the concentrations of soluble and in-soluble Phosphorus
Turbidity	Cloudiness or haziness of the water caused by individual particles that are too small to see without magnification
Salinity	A measure of the concentration of dissolved salts in the river
pH	A measure of the acidity or alkalinity of water
Aquatic Life sub-index	
AUSRIVAS	Australian River Assessment System – an indicator of the quality of instream habitat based on the presence of particular macroinvertebrate Families
SIGNAL	Stream Invertebrate Grade Number Average Level – is a measure of the effect of pollution on macroinvertebrate Families
EPT	Three Orders of macroinvertebrates: Ephemeroptera (mayflies), Plecoptera (stoneflies) and Trichoptera (caddisflies)
Number of Families	The number of different macroinvertebrate Families in a sample

Attachment 6 – GVW Offtake Points and Potable Reservoirs

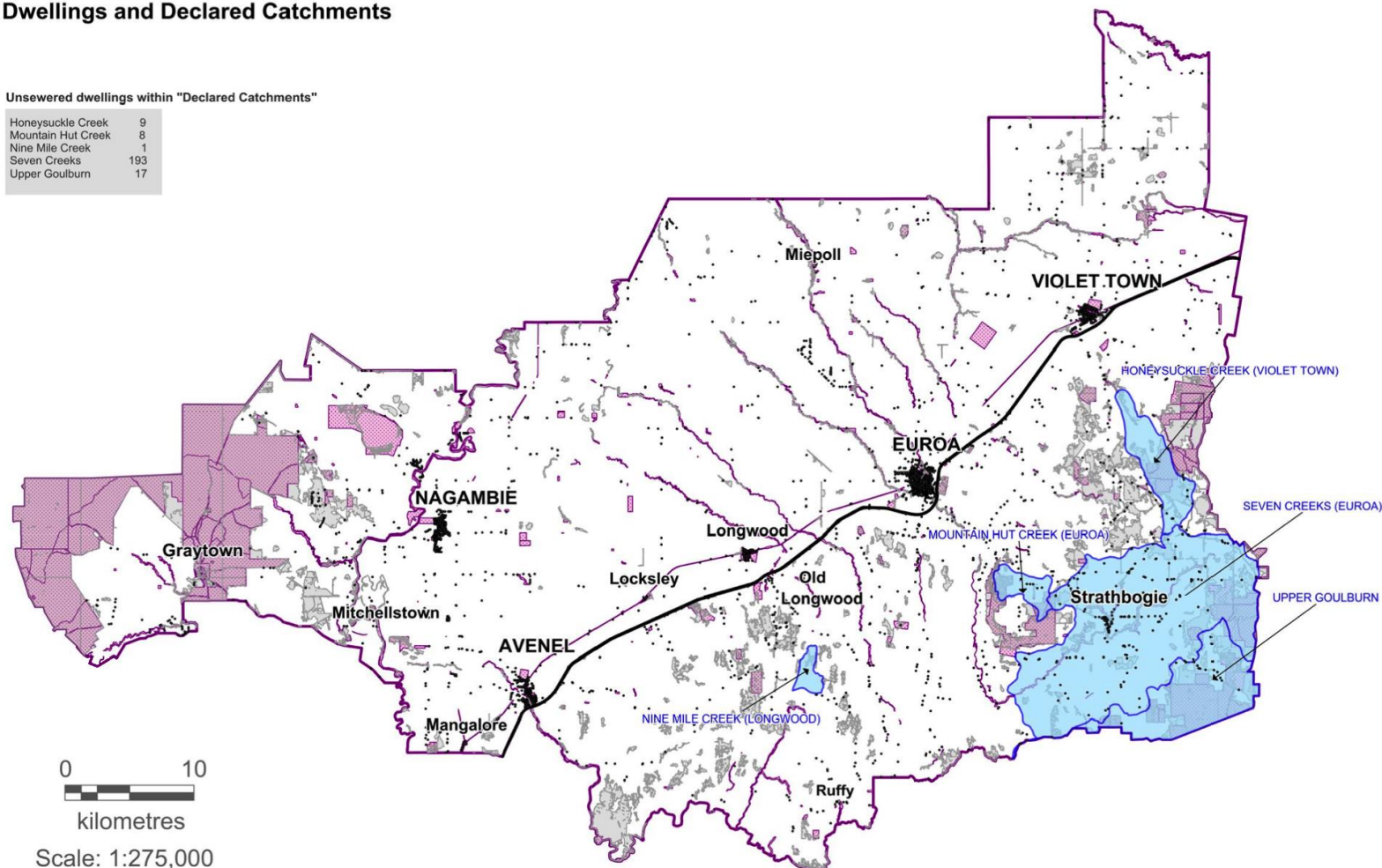


Attachment 7 – Location of Existing Onsite Domestic Wastewater Management Systems

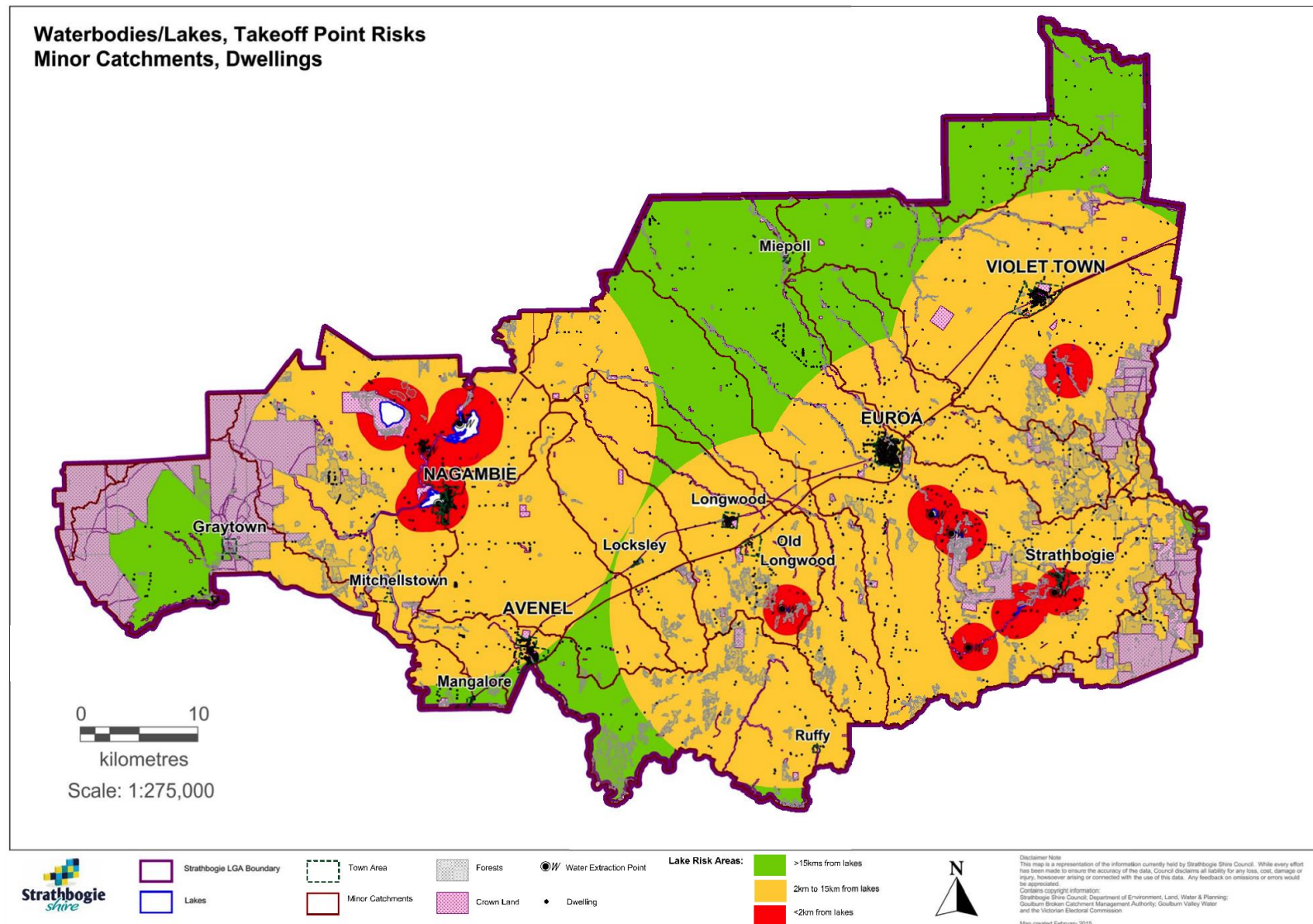
Dwellings and Declared Catchments

Unsewered dwellings within "Declared Catchments"

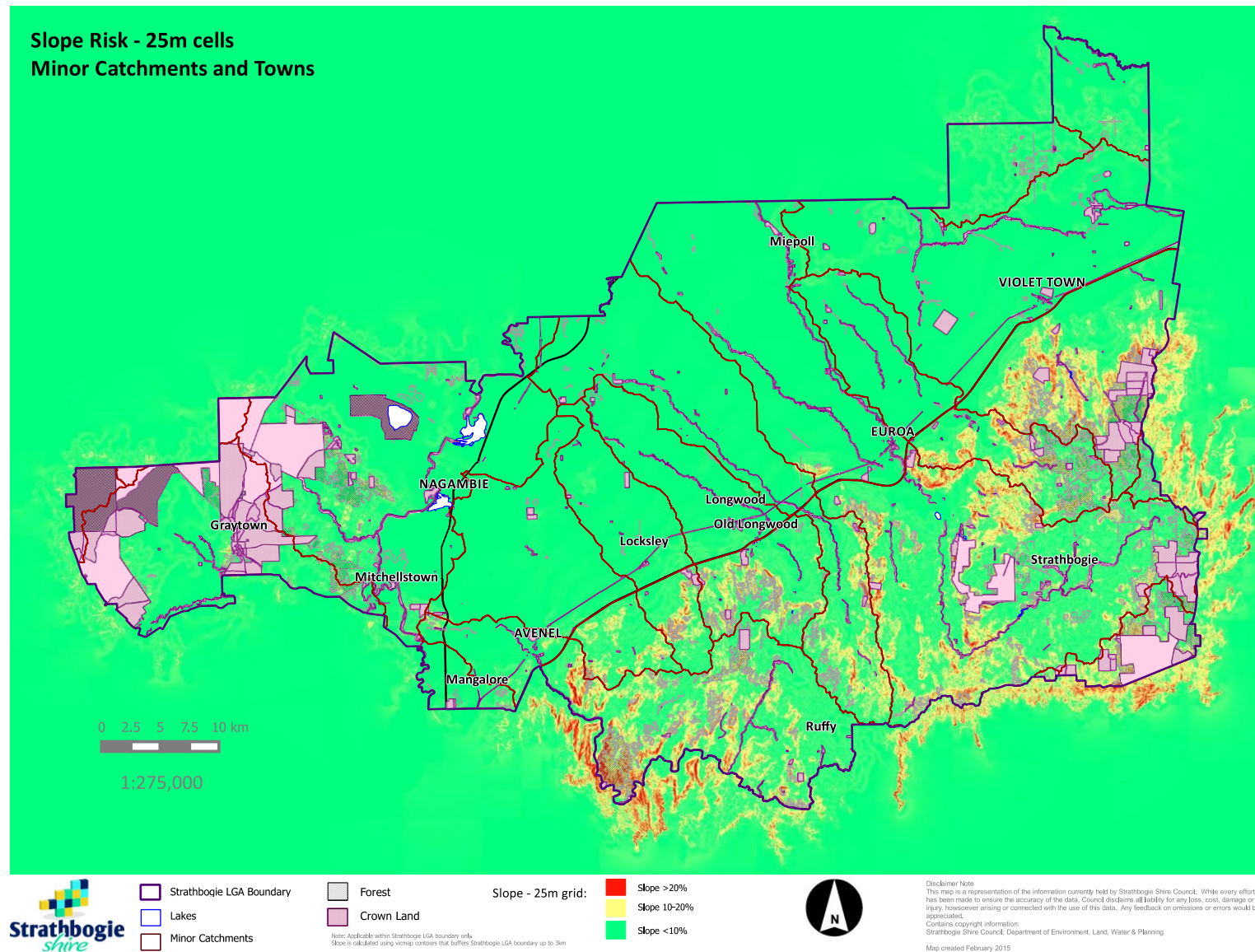
Honeysuckle Creek	9
Mountain Hut Creek	8
Nine Mile Creek	1
Seven Creeks	193
Upper Goulburn	17



Attachment 8A – Waterbody and Potable Water Asset Risk Map



Attachment 8B – Slope Risk Map



Attachment 8C – Soil Risk Map

