Salinity Discharge Mapping for the Merino Tablelands in the Glenelg Salinity Region

Rosalind More

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Department of Conservation & Natural Resources

SUMMARY

The objective of this study was to determine the area, severity and location of salinity discharge in the Merino Tablelands and present it in map and database form.

Aerial photos were used for the location of saline sites and an extensive ground truthing program carried out using ISCON techniques for the classification of salt severity.

A total of 304 hectares were found to be salt affected. A large proportion of the sites were affected by a low level of salinity although some were moderately saline. The majority of the discharge sites appeared in drainage lines and were half a hectare in size. Small sites also occurred on hillsides, with larger areas appearing on river flats.

Most sites had not been treated. This highlights the need to increase the awareness of salinity in the area.

CONTENTS

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1. INTRODUCTION

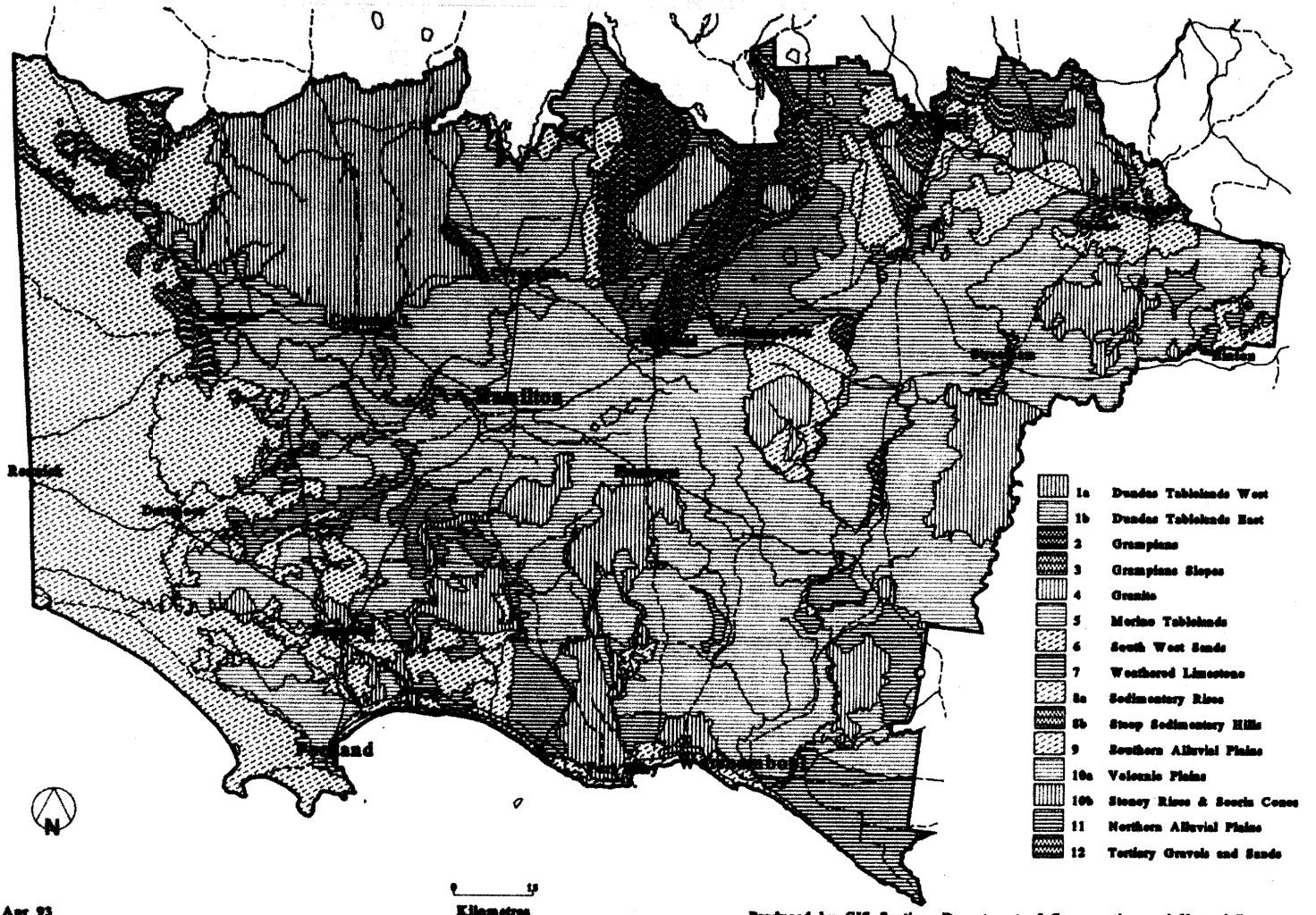
1.1 The Glenelg Salinity Strategy & Previous Studies

It is well known that salinity is one of the most serious forms of land degradation in Victoria. In 1988 a Government investigation found that dryland salinity alone affected 120 000 hectares statewide and a further 365 000 hectares were considered to be at risk from dryland and irrigation salinity (Govt. Victoria, 1988). In the Glenelg Salinity Region it has been estimated there are 19 970 hectares of land affected by salt (Ward, 1992) and that the symptoms of salinity cost the Glenelg Regional community over $2 million each year in lost agricultural production (Glenelg Salinity Forum, 1993).

The Glenelg Region Salinity Forum was set up in 1991 to prepare a strategy to combat the problem of dryland salting in the region. Information about salinity, available at the time, was used to formulate the strategy. Several studies had been carried out in the region in the past which involved the mapping or measurement of salinity (Dunn (1991), Fisher (1991), Jerinic (1993) and Sturmfels (1992)). These took place to the south, north west, north and north east respectively of Hamilton. By no means, however, did they cover the whole of the Glenelg Region. Information about salinity in other areas of the region, including the Merino Tablelands land management unit (LMU) (refer to Map 1 for location), was based on the knowledge of field staff from the Department of Conservation and Natural Resources (CNR) and on observations of individual landholders and landholder groups (Ward, 1992). Due to the subjective nature of this information it was decided that a mapping program should begin to improve the reliability of salinity discharge data (Glenelg Salinity Forum, 1993). The Merino Tablelands were chosen because of this low reliability of information and the large proportion of land thought to be salt affected.

The only salinity program that had covered any section of the Merino Tablelands was a Salinity Awareness Project conducted. by Don McPhee, and even then precise areas were not mapped, although extensive notes about the location of saline sites served as a very useful tool in completion of this study. One resource with accurately mapped saline areas included Catchment Plans being completed by the Smokey River Land Protection Group and the Chetwynd Landcare Group at the time this study was taking place. Whole farm plans from individual landholders were also used where available, although this was not a large source of information.

Map 1. Glenelg Salinity Region - Land Management Units



from Glenelg Salinity Forum (1993)

1.2 Objectives of the Study the objectives of this study are:

1) To determine the extent and severity of dryland salting throughout the Merino Tablelands,

2) To define and accurately map salinity discharge areas in the Merino Tablelands, and

3) To provide base data information for the formulation of salinity control strategies for the Merino Tablelands in the Glenelg Salinity Region.

2. DESCRIPTION OF THE STUDY AREA

2.1 Geology and Soils

Tertiary laterite in the upper part of the landscape has given way to soft calcareous sediments beneath (Gibbons & Downes, 1964). The point of highest recharge is thought to be just below the remnant laterite layer and local groundwater systems are influenced by aquifers held in weathered rock (Hill & Day, 1993).

Dark, heavy soils predominate with some red soils on the lateritic remnants and alluvial soils on valley bottoms (Gibbons & Downes, 1964).

2.2 Topography

The calcareous sediments, where the lateritic capping does not remain, have eroded to form the steeply rolling slopes that we see today. Deep valleys have been formed with convex upper and concave lower slopes and flat valley floors (Gibbons & Downes. 1964). Drainage lines are numerous.

2.3 Climate

The annual rainfall for the Merino Tablelands is between 600 and 650mm with a high winter and spring incidence. Severe frosts can occur for two to three months of the year. Summers are warm and dry with the occurrence of very hot days having been recorded (LCC, 1979).

2.4 Vegetation

The Merino Tablelands were predominantly a treeless grassland before European settlement mainly because the shrinking, swelling nature of the clay made it impossible for many deep rooted perennial plants to be successful. Some tree species with a deep rooting system or growing near a perched water table were able to survive. Some scattered she-oaks (*Casuarina* sp.) now grow on the red soils of the lateritic remnants and river red gum (*Eucalyptus camaldulensis*) grows along the larger creeks and water courses (Gibbons & Downes, 1964).

2.5 Landuse

Landuse is predominantly sheep grazing with some cattle grazing as well. A post war soldier settlement scheme led to the development of dairy farming although this was not very successful because of the lack of feed associated with low summer rainfall. Only scattered dairy farms now remain (Gibbons & Downes, 1964).

3. METHODOLOGY

3.1 Aerial Photographs

Black and white aerial photos of the area, taken in 1986-87 at a scale of 1:40 000, were used in the study. Those photos which fell within the boundaries of the Merino Tablelands were selected. Sites that were possibly saline were marked on plastic overlay material on the photos for field checking.

3.2 Field Assessment

3.2.1 Location of Possible Saline Sites

Extensive and detailed ground truthing for the positive identification of possibly saline areas was carried out. The farmers who owned the land where each site fell were approached for permission to inspect the area. Where Whole Farm Plans had been completed smaller seeps were able to be located, or where they had not, simply getting to some of the larger sites revealed smaller areas that were not able to be seen on the aerial photos. Due to the steep topography of the Merino Tablelands and the resulting small hillside seeps and narrow drainage lines, this became as important a way of locating salinity as marking areas on aerial photos. By using these three methods (aerial photos, farmer knowledge and observation in the field) the LMU was comprehensively inspected for discharge areas.

3.2.2 Assessment of Site for Salinity Indicators

Each site was assessed in accordance with the Inventory of Soil Conservation Needs (ISCON) techniques described in detail by Matters (1987) and Matters & Bozon (1989). In brief, a site was inspected for the presence of three or four salt indicator species and other symptoms of salinity. These included the appearance of bare ground, ground water seepage, salt crystals and scalds, erosion as a result of deterioration in soil structure and deterioration or eventual death of trees. Each site was given a severity rating, low (Class 1), medium (Class 2) or severe (Class 3), with the presence of the more salt tolerant species and the increasing appearance of bare ground, salt and the other symptoms of salinity indicating a more severely affected area. Where the site was not purely one class, an estimate of the percentage of each class was made and the overall classification given as the one with the greatest percentage. Indicator species found and the severity classes which they fall into are listed in Appendix 1. The severity classes, Cl, 2 & 3 are described in Table 1.

3.2.3 Water Sampling

In some cases it was difficult to tell whether a drainage line was salt affected or simply water logged. If two or more salt indicator species were present the site was considered to be salty (Matters 1987). Water samples were taken to check the electrical conductivity (EC um/cm) of the water and decide on the severity of salting.

3.2.4 Defining and Recording Areas

Areas that were reasonably large and were able to be made out on the aerial photos were marked directly on to the overlays on the photos. Where seeps were too small too be seen on the photos (for example 10m`) a point was used to mark their position and an estimate made of the area by pacing the length and width. Narrow drainage lines were marked with a dotted line onto photos and width noted at a number of points.

Table 1. Salinity Class Characteristics

Class	Severity of salting	Site characteristics
1	Low	-patchy growth in paddock -reduced vigour of crop or pasture -pastures thin or die out, replaced by more salt tolerant species -no salt crystals or bare patches seen
2	Medium	-species of higher salt tolerance replace Cl indicators -salt stress causes change in leaf shape & colour -salt stains & scalds may appear -bare areas up to 1 square meter
3	High	-only highly salt tolerant plants present -2 or 3 species dominate -large areas of bare ground -trees may be dead or dying

from Matters & Bozon (1989)

It was considered whether an area was affected by primary or secondary salting. Primary salinity is a natural occurrence and is often evident in the form of saline lakes and wetlands. Secondary salinity, on the other hand, is induced as a result of human activity and occurs when water tables rise and bring dissolved salts to the surface of the land (Glenelg Salinity Forum, 1993).

Additional information about land ownership, landuse, history of appearance of discharge, type of discharge, position of salinity in the landscape, evidence of salinity and treatment of discharge was noted. Each site was given an individual number. One number was used for several areas if they were located close together and had similar severities of salting and class indicator species.

All of the information for each site was recorded onto an individual site assessment sheet. A copy of a blank site assessment sheet can be seen in Appendix 2. The completed sheets for each of the sites identified in the study are held at the CNR office in Hamilton.

3.3 Maps and Database

Areas were transferred from the aerial photos and overlays onto 1:25 000 map sheets using a Sketchmaster. Seeps that had been unable to be drawn onto the aerial photos because they were too small, and therefore shape not recorded, were marked as dots on the mapsheets and area calculated from notes taken. Drainage lines that were less than twenty-five meters wide (or one pen line wide) on the mapsheet were marked as dotted lines and the width at several points averaged and multiplied by the length to obtain area. Areas of the larger sites were calculated by counting grid squares (1 mm^2 = 25 m^2). A planimeter would normally be used in the calculation area for discharge sites, but the small size of discharge areas in this LMU made it impossible to do so.

Information for each site from the assessment sheets was entered onto a computer database. The original assessment sheets, database and maps are held at the Hamilton CNR office.

3.4 Limitations of the Study

Not all of the plants at a particular site were identified and recorded, only salt indicator species. This was because of limited time and it was not one of the objectives of the study to complete a detailed botanical survey.

The complete length of drainage lines were not surveyed, again due to limited time. Drainage lines were checked for salinity at as many crossings or accessible points as possible. If a drainage line was saline along a number of lengths and at a number of checkpoints along its course, it was considered the whole drainage line was affected.

4. RESULTS

Information about the saline sites identified in this study are shown in a print out of the data base in Appendix 3.

4.1 Summary Information

The area affected by salinity discharge added up to a total of 304 hectares. The area of the Merino Tablelands is 96 000 hectares, therefore 0.3% of the LMU is salt affected.

There were a total of 417 sites, with an average size of 0.7 hectares. Of all the sites, 82% were less than one hectare and 18% greater than one hectare. The largest site measured was 16.8 hectares and the smallest site 0.005 of a hectare.

4.2 Type of Salinity

It was difficult to know if an area of salinity was a natural occurrence (an area of primary salting), even if the farmer knew the history of the property and it had always been there during his/her lifetime. Such sites may have developed soon after settlement and stock grazing commenced (induced or secondary salting). None of the sites were salt lakes or salt pans which occur naturally. Most were seeps along drainage lines, hillsides, or on river flats that would have been induced by agricultural activity. All of the sites, therefore, were considered to be secondary saline areas.

4.3 Indicators of Salinity

At most sites vegetation served as the main indicator of salinity. In some areas bare ground appeared regardless of whether the site was saline or not because vegetation had been trampled and soil broken up by stock traffic. In other cases bare ground appeared as the dry bed of a billabong or drainage line and here, the breakdown of soil structure or the "powdery" look of soil was an indication of salinity. Scalds and tree deterioration and death were less common indicators.

Plant species commonly found throughout the study area were Strawberry Clover (*Trifolium fragiferum*), Buck's Horn Plantain (*Plantago coronopus*), Sea Barley Grass (*Hordeum marinum*), Annual Beard Grass (*Polypogon monospliensis*) and Australian Salt Grass (*Distichlis distichiphylla*). Sea Barley Grass was found extensively on the flats. In wetter areas Spiny Rush (Juncus acutus), Streaked Arrow Grass *(Triglochin striata*) and Water Buttons (*Cotula coronepifolia*) were common. Although not considered salt indicator species, Cumbungi (*Typha orientalis*) and Common Reed (*Phragmites australis*) are tolerant of saline conditions (Cunningham, Mulham, Milthorpe & Leigh (1981), Sainty & Jacobs (1988)). Where they occurred in conjunction with water buttons and annual beard grass, and water samples indicated salinity, the drainage lines were mapped as saline.

One species that was commonly found on the borders of dried up drainage lines and billabongs was Creeping Monkey-Flower (*Mimulus repens*). This was positively identified by staff at the National Herbarium in Melbourne. It has not previously been included in the list of salt indicator species and has been recommended for inclusion in the reprint of the field guide for the identification of soil salinity (Matters & Bozon, 1989).

4.4 Severity Classes

The results in Table 2 show that most of the area of salt affected land was of low severity (Class 1) and nearly all of the area was affected by low or moderate (Class 2) severity salting. The area affected by severe salting (Class 3) was negligible.

Table 2. Area of Land in Each Severity Class

Severity Class	Area (hectares)
1	261
2	44
3	0.001

4.5 Position of Salinity in the Landscape

The majority of discharge sites appeared along drainage lines with a large number also on river flats and on slopes. Fewer sites were seen bordering billabongs and dams and fewer still at break of slope. Those sites found on flats were on average the largest discharge sites and those sites found on slopes the smallest. These results are shown in Table 3.

Table 3. Position of Salinity in the Landscape

Position in landscape	Number of sites	Area (hectares)	Average size of each site (hectares)
D	260	144	0.55
F	71	128	1.80
S	58	16	0.28
B	10	6	0.60
M	18	11	0.61

NB: D = Drainage line, F = Flat, S= Slope, B = Break of Slope & M = Water-body margin

4.6 Treatment of Salinity

By far the majority of discharge sites were untreated as can be seen from the results in Table 4. Sites where sections of a drainage line, but not the entire length, had been treated were recorded as having some treatment. Few areas had been completely treated. The total area of untreated discharge was two hundred and sixty hectares or eighty six percent of the salt affected land in the LMU.

Table 4. Treatment of Salinity

Treatment of site	Number of sites	Area (hectares)
Y	20	30
S	12	14
N	385	260

NB: Y = Yes the area has been treated, S = Some of the area has been treated & N = No the area has not been treated.

Most of the sites treated were of CI or a combination of C1 and C2 severities. Very few C2 sites were treated. The results in Table 5 show the number of sites of each class or combinations of class that were treated.

Table 5. Treatment according to severity class

Severity class of site	Number of sites	Number of sites treated (completely or partially)
1	291	21
1-2	113	9
2	12	2
2-3	1	0

5. DISCUSSION

The overall area affected by saline discharge in the Merino Tablelands was not very large, but small sites were reasonably uniformly scattered throughout the LMU.

Many small areas of salting, only a matter of a few meters wide, occurred along drainage lines, either as seeps along their edges or immediately in or around them. These sites were numerous simply because of the steep topography of the Merino Tablelands and the large network of drainage lines. Small hillside seeps were also common, possibly occurring where perched aquifers were exposed by the slope of the land. The small area of salting in these sites has not rendered a large area of agricultural land unproductive at present and is not likely to do so in the future. The main threat from salting along drainage lines is acceleration of erosion and the effect of increasing salinity levels on water quality in dams and waterways. It was not the objective of this study, however, to measure these components. A significant rise in watertable heights would need to occur to affect a large amount of land surrounding drainage lines.

Most of the larger sites measured were found on river flats. The severity of these sites was generally low. These areas, however, have left a reasonable proportion of the landholders property unproductive in some cases. The river flats are at greater risk from rising watertables than the hills. If this were to occur, agricultural production could be threatened.

Landholder awareness of a salinity problem was low with many farmers not recognizing low to moderate severity salting where it occurred on their property. Many of the moderate severity C2 sites had not been treated. Other farmers have treated areas where C1 or a combination of C1 and C2 salting occurs, or sites where salinity is associated with another form of land degradation such as erosion.

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Appendix 1. Plant Species Found in Saline Areas Salt Indicator Species

Grasses		**Salinity Class**
Sea Barley Grass	*Hordeum marinum*	1-2
Tall Wheat Grass	*Agropyron elongatum*	1-2
Annual Beard Grass	*Polypogon monospliensis*	2
Australian Salt Grass	*Distichlis distichiphylla*	2
Slender Barb Grass	*Parapholis strigosa*	2
Rushes		
Spiny Rush	*Juncus acutus*	1-2
Toad Rush	*Juncus bufonius*	1-2
Streaked Arrow Grass	*Trilochin striata*	2
Small Plants and Shrubs		
Buck's Horn Plantain	*Plantago coronopus*	1-2
Coast Sand Spurrey	*Spergularia media*	1-2
Strawberry Clover	*Trifolium fragiferum*	1-2
Swamp Weed	*Selliera radicans*	1-2
Creeping Brookweed	*Samolus repens*	2
Water Buttons	*Cotula coronopifolia*	2
Rounded Noonflower	*Disphyma clavellatum*	2-3
Trees		
Swamp Paperbark	*Melaleuca ericifolia*	1-2 from Matters& Bozon (1989)
Salt Tolerant Species		
Creeping Monkey Flower	*Mimulus repens*	
Common Reed	*Phragmites australis*	
Cumbungi	*Typha orientalis*	

Appendix 2. Site Assessment Sheet

DRYLAND SALINITY MONITORING
SITE DESCRIPTION SHEET

PHOTO NUMBER:_____ SITE NUMBER:_____

1:25 000 MAP NAME:_____ MAP CO-ORD.

MAP NUMBER:_____ EASTING:_____00

NORTHING:_____00

LAND MANAGEMENT UNIT:_____ LAND USE:_____

LAND OWNERSHIP:_____ LANDHOLDER:_____

Telephone:_____

Postal address:_____

_____

HISTORY:

Year of clearing:_____ Appearance of discharge on site (yr):_____

Evidence of discharge (photos, documents, verbal):_____

_____

POSITION OF SALINITY IN LANDSCAPE

Slope	☐	Flat	☐
Break of slope	☐	Depression	☐
Drainage line	☐	Gully	☐
Lake margin	☐	Sandridge/dune	☐
Lunette	☐		

TYPE OF DISCHARGE

Induced	Seep	☐	Natural	Salt marsh	☐
	Spring	☐		Salt pan	☐
Combination	Induced	☐ %		Salt flat	☐
	Natural	☐ %			

SALINITY CLASS	EXTENT %	EXTENT ha.
1		
2		
3		
TOTAL	100	
OVERALL CLASS		

EVIDENCE OF SALINITY

Groundwater	☐	Crop/pasture deterioration	☐
Salt	☐	Tree deterioration	☐
Bare ground	☐	Tree death	☐
Erosion	☐	Vegetation (details over)	☐

TREATMENT OF DISCHARGE None ☐ Yes ☐ Describe_____

_____

_____

TREATMENT OF RECHARGE None ☐ Yes ☐ Describe_____

_____

SALT-TOLERANT SPECIES

Grasses		Present	Salinity Indicator Class 1	2	3
Annual Beard Grass	*Polypogon monspeliensis*		/		/
Australian Salt Grass	*Distichlis distichophylla*		/		/
Curly Rye Grass	*Parapholis strigosa*		/		/
Hill Wallaby Grass	*Danthonia erianthe*			/	/
Saltmarsh Grass	*Puccinellia stricta*				/
Sea Barley Grass	*Hordeum marinum*				/
Slender Barb Grass	*Parapholis strigosa*		/		/
Swamp Couch Grass	*Cynodon dactylon*				/
Tall Wheat Grass	*Agropyron elongatum*				/
Wimmera Rye Grass	*Lolium rigidum*				/
Windmill Grass	*Chloris truncata*				/

Rushes		Present	1	2	3
Club Rush	*Scirpus sp.*		not	known	
Spiny Rush	*Juncus acutus*				/
Streaked Arrow Grass	*Triglochin striata*	—	/		/
Toad Rush	*Juncus bufonius*				/

Herbs		Present	1	2	3
Bucks Horn Plantain	*Plantago coronopus*			/	
Coast Sand Spurrey	*Spergularia media*				/
Creeping Brookweed	*Samolus repens*		/		/
Red Crumbweed	*Dysphania glomulifera*		/		/
Salt Anglanthus	*Anglanthus preissianus*				/
Strawberry Clover	*Trifollum fragiferum*				/
Swamp Weed	*Selliera radicans*				/
Water Buttons	*Cotula coronopifolia*		/		/

Succulents		Present	1	2	3
Beaded Glasswort	*Sarcocornia quinqueflora*		/		
Bonefruit	*Threlkeldia salsuginosa*		/	/	
Iceplant	*Mesembryanthemum crystallinum*		/		/
Rounded Noonflower	*Disphyma clavellanum*		/		
Ruby Saltbush	*Enchylaena tomentosa*		/		/
Samphire	*Halosarcia pergranulata*		/	/	
Sea Blite	*Suaeda australis*		/		

Trees		Present	1	2	3
Swamp Paperbark	*Melaleuca ericifolia*				/

OTHER SPECIES FOUND AT SITE

SALT SENSITIVE SPECIES

GRASSES		Present
Barley Grass	*Hordeum leporinum*	
Creeping Bent Grass	*Deyeuxia sp.*	
Kangaroo Grass	*Themeda triandra*	
Onion Grass	**Romulea rosea*	
Perennial Rye Grass	**Lolium perenne*	
Shivery Grass	*Briza minor*	
Short Wallaby Grass	*Danthonia carphoides*	
Sweet Vernal Grass	**Anthoxanthum odoratum*	
Yorkshire Fog Grass	**Holcus lanatus*	

*Weed

RUSHES	
Broad-leaf Rush	*Juncus planifolius*
Finger Rush	*Juncus subsecundus*
Jointed Rush	**Juncus articulatus*

HERBS	
Cape Weed	**Arctotheca calendula*
Herons-bill	*Erodium sp.*
Hairy Hawkbit	**Leontodon taraxacoides*
Small Sand spurrey	*Spergularia diandra*
Subterranean Clover	**Trifollum subterraneum*
Suckling Clover	**Trifollum dubium*
Woolly Clover	**Trifollum tomentosum*

Appendix 3. SALINITY DISCHARGE SITES IN THE MERINO TABLELANDS

19-Jul-94

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_ AREA	SEVERITY	TREATDSCR	POSITION
03001	DERGIILMCHETWYND	0.075	0	0	0.075	1	N	S
03002	DERGIILMCHETWYND	0.139	0	0	0.139	1	N	D
03003	DERGIILMCHETWYND	1.493	0	0	1.493	1	N	D
03004	DERGIILMCHETWYND	0.9	0	0	0.9	1	N	B
03005	DERGIILMCHETWYND	0.2	0	0	0.2	1	N	D
03006	DERGIILMCHETWYND	0.675	0.825	0	1.5	2	N	F
03007	DERGIILMCHETWYND	0.42	0.1	0	0.52	1	N	D
03008	DERGIILMCHETWYND	1.215	0	0	1.21	1	N	F
03009	DERGIILMCHETWYND	1.4	0	0	1.4	1	N	D
03010	DERGIILMCHETWYND	0.24	0	0	0.24	1	N	D
03011	DERGIILMCHETWYND	0.056	0.14	0	0.196	2	N	D
03012	DERGIILMCHETWYND	0.334	0.09	0	0.424	1	S	D
03013	DERGIILMCHETWYND	1.041	0.451	0	1.492	1	N	D
03014	DERGIILMCHETWYND	0.29	0.435	0	0.725	2	N	D

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_ AREA	SEVERITY	TREATDSCR	POSITION
03015	DERGIILMCHETWYND	0.181	0	0	0.181	1	N	S
03016	DERGIILMCHETWYND	0.1	0	0	0.1	1	N	S
03017	DERGIILMCHETWYND	0	0.52	0	0.52	2	V	B
03018	DERGIILMCHETWYND	0.22	0	0	0.22	1	N	S
03019	NAREEN DUNDAS	0.32	0	0	0.32	1	N	D
03020	NAREEN DUNDAS	0.195	2.035	0	2.23	2	Y	D
03021	NAREEN DUNDAS	0.006	0.009	0	0.015	2	N	S
03022	NAREEN DUNDAS	0.4	0	0	0.4	1	Y	D
03023	CASTERTON NORTH	0.045	0	0	0.045	1	N	D
03024	CASTERTON NORTH	0.168	0	0	0.168	1	S	D
03025	CASTERTON NORTH	0.108	0.27	0	0.378	2	N	M
03026	CASTERTON NORTH	0.26	0.39	0	0.65	2	N	D
03027	CASTERTON NORTH	0.042	0.018	0	0.06	1	N	D
03028	CASTERTON NORTH	0.392	0.168	0	0.56	1	N	D
03029	CASTERTON NORTH	0.064	0	0	0.064	1	N	D
03030	CASTERTON NORTH	1.7	0	0	1.7	I	N	B

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_ AREA	SEVERITY	TREATDSCR	POSITION
03031	CASTERTON NORTH	0.5	0	0	0.5	1	N	F
03032	CASTERTON NORTH	1.938	0	0	1.938	1	N	F
03033	CASTERTON NORTH	0.325	0	0	0.325	1	N	D
03034	CASTERTON NORTH	0.11	0	0	0.11	1	N	D
03035	CASTERTON NORTH	0.29	0	0	0.29	1	N	D
03036	CASTERTON NORTH	0.094	0	0	0.094	1	N	D
03037	CASTERTON NORTH	1.838	0.788	0	2.625	1	N	F
03038	CASTERTON NORTH	1.25	0	0	1.25	1	N	F
03039	CASTERTON NORTH	3.625	0	0	3.625	1	N	F
03040	CASTERTON NORTH	4.499	0.809	0	5.308	1	N	F
03041	CASTERTON NORTH	0.06	0	0	0.06	I	N	D
03042	CASTERTON NORTH	0.1	0	0	0.1	1	Y	D
03043	CASTERTON NORTH	0.055	0	0	0.055	1	N	D
03044	CASTERTON NORTH	0.225	0	0	0.225	1	N	D
03045	CASTERTON NORTH	0.288	0	0	0.288	1	N	D
03046	CASTERTON NORTH	0.617	0.044	0	0.661	1	Y	D

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_ AREA	SEVERITY	TREATDSCR	POSITION
03047	CASTERTON NORTH	0.15	0.017	0	0.167	1	N	D
03048	CASTERTON NORTH	1.42	0.947	0	2.366	1	N	
03049	CASTERTON NORTH	0.188	0	0	0.188	1	N	M
03050	CASTERTON NORTH	0.563	0	0	0.563	1	N	M
03051	CASTERTON NORTH	0.17	0	0	0.17	1	N	M
03052	CASTERTON NORTH	0.938	0	0	0.938	1	N	F
03053	CASTERTON NORTH	0.838	0	0	0.838	1	N	F
03054	CASTERTON NORTH	4.339	0.736	0	5.075	1	N	F
03055	CASTERTON NORTH	0.753	0.04	0	0.793	1	N	F
03056	CASTERTON NORTH	0.464	0.04	0	0.504	1	N	D
03057	CASTERTON NORTH	0.853	0.327	0	1.18	1	N	D
03058	CASTERTON NORTH	3.688	0	0	3.688	1	N	B
03059	CASTERTON NORTH	0.023	0	0	0.023	1	N	D
03060	CASTERTON NORTH	1.565	0	0	1.565	1	N	D
03061	CASTERTON NORTH	0.131	0.306	0	0.438	2	N	D
03062	CASTERTON NORTH	0	0.275	0	0.275	2	N	D

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_ AREA	SEVERITY	TREATDSCR	POSITION
03063	CASTERTON NORTH	0.15	0.1	0	0.25	N	D	
03064	CASTERTON NORTH	0.315	0	0	0.315	N	D	
03065	COLERAINE NORTH	0.02	0	0	0.02	N	S	
03066	COLERAINE NORTH	15.844	0.969	0	16.813	N	F	
03067	CASTERTON NORTH	6.585	2.871	0	9.456	S	F	
03068	COLERAINE NORTH	2.663	0	0	2.663	N	F	
03069	COLERAINE NORTH	0.61	0	0	0.61	N	F	
03070	COLERAHNE NORTH	0.44	0.04	0	0.48	N	D	
03071	COLERAHNE NORTH	0.325	0	0	0.325	N	D	
03072	COLERAINE NORTH	2.688	0	0	2.688	N	D	
03073	COLERAINE NORTH	0.602	0.266	0	0.868	N	D	
03074	COLERAINE NORTH	0.575	0	0	0.575	N	M	
03075	COLERAINE NORTH	1.22	0	0	1.22	N	M	
03076	COLERAINE NORTH	0.352	0.019	0	0.37	N		
03077	COLERAINE NORTH	0.673	0	0	0.673	N	M	
03078	COLERAINE NORTH	0.313	0	0	0.313	N	S	

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_ AREA	SEVERITY	TREATDSCR	POSITION
03079	COLERAINE NORTH	0.125	0	0	0.125	1	N	M
03080	COLERAINE NORTH	0.091	0.137	0	0.228	2	N	
03081	COLERAINE NORTH	0.018	0	0	0.018	1	N	D
03082	COLERAINE SOUTH	0.131	0.197	0	0.328	2	N	D
03083	COLERAINE NORTH	5.063	0	0	5.063	1	Y	F
03084	COLERAINE NORTH	0.065	0.044	0	0.109	1	N	B
03085	COLERAINE NORTH	0.18	0	0	0.18	1	Y	F
03086	COLERAINE NORTH	0.188	0	0	0.188	1	N	F
03087	COLERAINE NORTH	0.005	0	0	0.005	1	N	F
03088	COLERAINE NORTH	0.583	0	0	0.583	1	N	S
03089	COLERAINE NORTH	0.49	0	0	0.49	1	N	D
03090	COLERAINE NORTH	0.47	0	0	0.47	1	N	D
03091	COLERAINE NORTH	0.465	0.285	0	0.75	1	N	D
03092	COLERAINE NORTH	1.231	0.084	0	1.315	1	N	D
03093	COLERAINE NORTH	0.102	0.023	0	0.125	H	N	D
03094	COLERAINE NORTH	0.53	0	0	0.53	1	N	D

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_ AREA	SEVERITY	TREATDSCR	POSITION
03095	COLERAINE NORTH	0.03	0	0	0.03	1	N	D
03096	COLERAINE NORTH	0.24	0	0	0.24	1	S	D
03097	COLERAINE NORTH	0.195	0	0	0.195	H	S	D
03098	COLERAINE NORTH	0.375	0	0	0.375	1	N	F
03099	COLERAINE NORTH	0.281	0	0	0.281	1	N	F
03100	COLERAINE NORTH	0.188	0	0	0.188	1	N	M
0310l	COLERAINE NORTH	0.268	0	0	0.268	1	N	D
03102	COLERAINE NORTH	0.02	0	0	0.02	1	N	D
03103	COLERAINE NORTH	0.23	0	0	0.23	1	N	D
03104	COLERAINE NORTH	0.056	0.507	0	0.563	2	N	D
03105	COLERAINE NORTH	0.178	0.119	0	0.296	1	N	D
03106	COLERAINE NORTH	0.332	0.069	0	0.401	1	N	D
03107	COLERAINE NORTH	0.24	0.06	0	0.3	1	Y	B
03108	COLERAINE NORTH	0.263	0.113	0	0.375	1	N	S
03109	COLERAHNE NORTH	0	1	0	1	2	N	S
03110	COLERAINE NORTH I	0.032	0.048	0	0.08	2	N	D

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03079	COLERAINE SOUTH	0.125	0	0	0.125	1	N	M
03080	COLERAINE NORTH	0.091	0.137	0	0.228	2	N	D
03081	COLERAINE NORTH	0.018	0	0	0.018	1	N	D
03082	COLERAINE SOUTH	0.131	0.197	0	0.328	2	N	D
03083	COLERAINE NORTH	5.063	0	0	5.063	1	Y	F
03084	COLERAINE NORTH	0.065	0.044	0	0.109	1	N	B
03085	COLERAINE NORTH	0.18	0	0	0.18	1	Y	F
03086	COLERAINE NORTH	0.188	0	0	0.188	1	N	F
03087	COLERAINE SOUTH	0.005	0	0	0.005	1	N	F
03088	COLERAINE NORTH	0.583	0	0	0.583	1	N	S
03089	COLERAINE SOUTH	0.49	0	0	0.49	H	N	D
03090	COLERAINE SOUTH	0.47	0	0	0.47	H	N	D
03091	COLERAINE NORTH	0.465	0.285	0	0.75	1	N	D
03092	COLERAINE NORTH	1.231	0.084	0	1.315	1	N	D
03093	COLERAINE SOUTH	0.102	0.023	0	0.125	I	N	D
03094	COLERAHNE NORTH	0.53	0	0	0.53	1	N	D

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03111	COLERAINE NORTH	0.313	0	0	0.313	1	N	D
03112	COLERAINE NORTH	0.375	0	0	0.375	I	Y	D
03113	COLERAINE NORTH	0.313	0	0	0.313	1	N	S
03114	NAREEN DUNDAS	0.12	0	0	0.12	1	N	D
03115	COLERAINE SOUTH	0.175	0.263	0	0.438	2	N	D
03116	COLERAINE SOUTH	0.075	0.05	0	0.125	1	N	D
03117	COLERAINE SOUTH	0.67	0.287	0	0.958	1	N	D
03118	COLERAINE SOUTH	0.08	0	0	0.08	1	N	D
03119	COLERAINE SOUTH	0.593	0	0	0.593	I	N	D
03120	COLERAINE SOUTH	0.133	0.057	0	0.19	1	N	D
03121	COLERAINE SOUTH	0.222	0.095	0	0.318	1	N	D
03122	COLERAINE SOUTH	0.314	0.135	0	0.449	1	N	D
03123	COLERAINE SOUTH	0.058	0.025	0	0.083	1	N	S
03124	COLERAINE SOUTH	0.452	0.194	0	0.645	1	N	D
03125	COLERAINE SOUTH	1.145	0	0	1.145	1	N	D
03126	COLERAINE SOUTH	0.063	0	0	0.063	1	M	

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03127	COLERAINE SOUTH	0.219	0	0	0.219	1	N	S
03128	COLERAINE SOUTH	0.069	0.046	0	0.115	1	S	D
03129	COLERAINE SOUTH	0.09	0.01	0	0.1	1	N	S
03130	COLERAINE SOUTH	0.05	0	0	0.05	1	N	S
03131	COLERAINE SOUTH	0	0.008	0	0.008	2	N	D
03132	COLERAINE SOUTH	0	0.32	0	0.32	2	N	F
03133	COLERAINE SOUTH	0.875	0	0	0.875	1	N	F
03134	COLERAINE SOUTH	0.111	0.167	0	0.278	2	N	D
03135	COLERAINE SOUTH	0.024	0	0	0.024	1	N	D
03136	COLERAINE SOUTH	8.25	0	0	8.25	1	N	F
03137	COLERAINE SOUTH	4.188	0	0	4.188	1	N	M
03138	COLERAINE SOUTH	0.483	0	0	0.483	1	N	F
03139	COLERAINE SOUTH	2.299	0	0	2.299	1	N	F
03140	COLERAINE SOUTH	0.056	0.131	0	0.188	2	N	F
03141	COLERAINE SOUTH	0.063	0.25	0	0.313	2	N	F
03142	COLERAINE SOUTH	1.204	0	0	1.204	1	N	F

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03143	COLERAINE SOUTH	1.375	0	0	1.375	1	N	F
03144	COLERAINE SOUTH	0.375	0	0	0.375	1	N	S
03145	COLERAINE SOUTH	1.125	0	0	1.125	1	N	D
03146	COLERAINE SOUTH	0.473	0	0	0.473	1	N	D
03147	COLERAINE SOUTH	0.3	0	0	0.3	1	N	F
03148	COLERAINE SOUTH	0.219	0	0	0.219	1	N	S
03149	COLERAINE SOUTH	0.063	0	0	0.063	1	Y	S
03150	COLERAINE SOUTH	0.26	0	0	0.26	1	Y	D
03151	COLERAINE SOUTH	1.808	0	0	1.808	1	Y	D
03152	COLERAINE SOUTH	1.313	0	0	1.313	1	N	D
03153	COLERAINE SOUTH I	0.219	0	0	0.219	1	N	S
03154	COLERAINE SOUTH	0.133	0	0	0.133	1	N	D
03155	COLERAINE SOUTH	0.021	0.05	0	0.071	2	N	D
03156	COLERAINE SOUTH	0.688	0	0	0.688	1	N	F
03157	COLERAINE SOUTH	4.25	0	0	4.25	1	N	F
03158	COLERAINE SOUTH	0.813	0	0	0.813	I	N	M

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03159	COLERAINE SOUTH	0.13	0	0	0.13	1	N	M
03160	COLERAINE SOUTH	0.22	0	0	0.22	1	N	F
03161	COLERAINE SOUTH I	1.438	0	0	1.438	1	N	F
03162	COLERAINE SOUTH	1.125	0	0	1.125	1	N	F
03163	COLERAINE SOUTH	0.594	0	0	0.594	1	N	F
03164	COLERAINE SOUTH	0.313	0	0	0.313	1	N	F
03165	COLERAINE SOUTH	0.563	0	0	0.563	1	N	M
03166	COLERAINE SOUTH	0.688	0	0	0.688	1	N	F
03167	COLERAINE SOUTH	0.063	0	0	0.063	1	N	F
03168	COLERAINE SOUTH	7.006	0.369	0	7.375	1	N	F
03169	COLERAINE SOUTH	0.124	0	0	0.124	1	N	D
03170	COLERAINE SOUTH	0.388	0	0	0.388	1	N	D
03171	COLERAINE SOUTH	0.231	0	0	0.231	1	N	D
03172	COLERAINE SOUTH	0.023	0	0	0.023	1	N	S
03173	COLERAINE SOUTH	0.303	0	0	0.303	1	N	D
03174	COLERAINE SOUTH	0.45	0	0	0.45	1	N	D

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03175	COLERAINE SOUTH	0.335	0	0	0.335	1	N	D
03176	COLERAINE SOUTH	3.463	0	0	3.463	1	N	D
03177	COLERAINE SOUTH	0.638	0	0	0.638	1	N	D
03178	COLERAINE SOUTH	0.375	0	0	0.375	1	N	
03179	COLERAINE SOUTH	0.944	0	0	0.944	1	N	D
03180	COLERAINE SOUTH	0.313	0	0	0.313	1	N	D
03181	COLERAINE SOUTH	0.25	0	0	0.25	1	N	M
03182	COLERAINE SOUTH	0.406	0	0	0.406	1	N	M
03183	COLERAINE SOUTH	0.335	0.06	0	0.395	1	N	D
03 I 84	COLERAINE SOUTH	0	0.606	0	0.606	2	N	D
03185	COLERAINE SOUTH	0.06	0.24	0	0.3	2	N	D
03186	COLERAINE SOUTH	0.444	3.316	0	3.76	2	N	D
03187	COLERAINE SOUTH	8	0	0	8	H	Y	F
03188	COLERAINE SOUTH	5.313	0	0	5.313	1	N	F
03189	COLERAINE SOUTH	1.063	0	0	1.063	1	N	D
03190	COLERAINE SOUTH	0.934	0.104	0	1.038	1	N	D

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03191	COLERAHNE SOUTH	0.088	0.059	0	0.146	1	N	D
03192	COLERAINE SOUTH	1.269	0.544	0	1.813	1	N	S
03193	COLERAINE SOUTH	0	0.065	0	0.065	2	N	D
03194	COLERAINE SOUTH I	0	0.045	0	0.045	2	N	D
03195	COLERAINE SOUTH	0.373	0	0	0.373	1	N	D
03196	COLERAINE SOUTH	0.013	0.313	0	0.325	2	N	D
03197	COLERAINE SOUTH	0.455	0.195	0	0.65	1	N	D
03198	COLERAINE SOUTH I	0.215	0.04	0	0.255	1	S	D
03199	COLERAINE SOUTH	0.025	0.003	0	0.028	1	N	D
03200	COLERAINE SOUTH	0.225	0	0	0.225	1	N	D
03201	COLERAINE SOUTH	0.599	0.086	0.001	0.685	1	N	D
03202	COLERAINE SOUTH	0.165	0	0	0.165	1	N	S
03203	COLERAINE SOUTH	0.24	0	0	0.24	1	N	S
03204	COLERAINE SOUTH	0.32	0	0	0.32	H	N	D
03205	COLERAINE SOUTH	0.4	0	0	0.4	1	N	D
03206	COLERAHNE SOUTH	0.063	0.25	0	0.313	2	N	S

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03207	COLERAINE SOUTH	0.113	0.075	0	0.188	1	N	S
03208	COLERAINE SOUTH	0.506	0.338	0	0.844	1	N	S
03209	COLERAINE SOUTH	0.131	0.056	0	0.188	1	N	D
03210	COLERAINE SOUTH	0.094	0	0	0.094	1	N	S
03211	COLERAINE SOUTH	0.024	0	0	0.024	1	N	S
03212	COLERAINE SOUTH	0.02	0	0	0.02	1	N	S
03213	COLERAINE SOUTH	0.06	0	0	0.06	1	N	S
03214	COLERAHNE SOUTH	0.063	0	0	0.063	1	N	S
03215	COLERAINE SOUTH	0.955	0	0	0.955	1	N	D
03216	COLERAINE SOUTH	0.469	0	0	0.469	1	N	D
03217	COLERAINE SOUTH I	0.6	0	0	0.6	1	N	D
03218	COLERAINE SOUTH	0.156	0	0	0.156	1	N	D
03219	COLERAINE SOUTH	0.21	0	0	0.21	1	N	D
03220	COLERAINE SOUTH	0.02	0	0	0.02	1	N	D
03221	COLERAINE SOUTH	0.263	0	0	0.263	1	N	D
03222	COLERAINE SOUTH	0.088	0	0	0.088	1	N	D

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03223	COLERAINE SOUTH	0.286	0	0	0.286	1	N	D
03224	COLERAINE SOUTH	0.013	0	0	0.013	1	N	D
03225	COLERAINE SOUTH	0.208	0	0	0.208	1	N	D
03226	COLERAINE SOUTH	0.213	0	0	0.213	1	N	D
03227	COLERAINE SOUTH	0.815	0	0	0.815	1	N	D
03228	COLERAINE SOUTH	0.14	0	0	0.14	1	N	D
03229	COLERAINE SOUTH	0.05	0	0	0.05	1	N	S
03230	COLERAINE SOUTH	0.11	0	0	0.11	1	N	D
03231	COLERAINE SOUTH	0.001	0	0	0.001	1	N	D
03232	COLERAINE SOUTH	1.185	0	0	1.185	1	N	D
03233	COLERAINE SOUTH	0.075	0	0	0.075	1	N	D
03234	COLERAINE SOUTH	0.08	0	0	0.08	1	N	D
03235	COLERAINE SOUTH	0.258	0	0	0.258	1	N	D
03236	COLERAINE SOUTH	0.175	0	0	0.175	1	N	D
03237	COLERAINE SOUTH	0.143	0	0	0.143	1	N	D
03238	COLERAINE SOUTH	0.15	0	0	0.15	1	N	S

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03239	COLERAINE SOUTH	0.6	0	0	0.6	1	N	D
03240	COLERAINE SOUTH	0.413	0	0	0.413	1	N	F
03241	COLERAINE SOUTH	0.403	0.605	0	1.008	2	N	D
03242	COLERAINE SOUTH	0.279	0	0	0.279	1	N	F
03243	COLERAINE SOUTH I	0.18	0	0	0.18	1	N	F
03244	COLERAINE SOUTH	0.3	0	0	0.3	1	N	D
03245	COLERAINE SOUTH	0.09	0	0	0.09	1	N	S
03246	COLERAINE SOUTH	0.118	0	0	0.118	1	N	D
03247	COLERAINE SOUTH	0.53	0	0	0.53	1	N	D
03248	COLERAINE SOUTH	1.15	0	0	1.15	1	N	D
03249	COLERAINE SOUTH	0.769	0	0	0.769	1	N	D
03250	COLERAINE SOUTH	1.219	0	0	1.219	1	N	D
03251	COLERAINE SOUTH	0.674	0	0	0.674	1	N	D
03252	COLERAINE SOUTH	0.563	0	0	0.563	1	N	D
03253	COLERAINE SOUTH	0.46	0	0	0.46	1	N	D
03254	COLERAINE SOUTH	0.57	0.09	0	0.66	1	N	D

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03255	COLERAINE SOUTH	0.702	0.421	0	1.123	1	N	D
03256	COLERAINE SOUTH	0.03	0	0	0.03	1	N	S
03257	COLERAINE SOUTH	0.813	0	0	0.813	1	N	D
03258	COLERAINE SOUTH	1.04	0	0	1.04	1	N	D
03259	COLERAINE SOUTH	0.281	0	0	0.281	1	N	D
03260	COLERAINE SOUTH	0.75	0	0	0.75	1	N	D
03261	COLERAINE SOUTH	0.188	0	0	0.188	1	N	D
03262	COLERAINE SOUTH	0.21	0	0	0.21	1	N	D
03263	COLERAINE SOUTH	0.375	0	0	0.375	1	N	D
03264	COLERAINE SOUTH	0.375	0	0	0.375	1	N	D
03265	COLERAINE SOUTH	0.5	0	0	0.5	1	N	D
03266	COLERAINE SOUTH	0.193	0	0	0.193	1	N	D
03267	COLERAINE SOUTH	0.53	0	0	0.53	1	N	D
03268	COLERAINE SOUTH	0.125	0	0	0.125	1	N	D
03269	COLERAINE SOUTH	0.523	0	0	0.523	1	N	D
03270	COLERAINE SOUTH	0.39	0	0	0.39	1	N	D

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03271	COLERAINE SOUTH	0.04	0	0	0.04	1	N	S
03272	COLERAINE SOUTH	2.448	0	0	2.448	1	N	D
03273	COLERAINE SOUTH	0.688	0	0	0.688	1	N	D
03274	COLERAINE SOUTH	1.139	0.127	0	1.265	1	N	D
03275	COLERAINE SOUTH	0.37	0	0	0.37	1	N	D
03276	COLERAINE SOUTH	0.625	0.938	0	1.563	2	N	D
03277	COLERAINE SOUTH	0.563	0	0	0.563	1	N	D
03278	COLERAINE SOUTH	3.713	0	0	3.713	1	N	D
03279	COLERAINE SOUTH	0.75	0	0	0.75	1	N	D
03280	COLERAINE SOUTH	1.188	0	0	1.188	1	N	D
03281	COLERAINE SOUTH	0.425	0	0	0.425	1	N	D
03282	COLERAINE SOUTH	0.07	0	0	0.07	1	N	D
03283	COLERAINE SOUTH	1.235	0	0	1.235	1	N	
03284	COLERAINE SOUTH	1.813	0	0	1.813	1	N	F
03285	COLERAINE SOUTH	0.125	0	0	0.125	1	N	F
03286	COLERAINE SOUTH	0.375	0	0	0.375	1	N	F

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03287	COLERAINE SOUTH	0.938	0	0	0.938	1	N	D
03288	COLERAINE SOUTH	1.233	0	0	1.233	1	N	D
03289	COLERAINE SOUTH	0.359	0	0	0.359	1	N	D
03290	COLERAINE SOUTH	0.176	0	0	0.176	1	N	D
03291	COLERAINE SOUTH	0.488	0	0	0.488	1	N	D
03292	COLERAINE SOUTH	0.125	0	0	0.125	1	N	S
03293	COLERAINE SOUTH	0.25	0	0	0.25	1	N	S
03294	COLERAINE SOUTH	0.188	0	0	0.188	1	N	D
03295	COLERAINE SOUTH	2.319	3.477	0	5.796	2	N	D
03296	COLERAINE SOUTH	0.281	0	0	0.281	1	N	D
03297	COLERAINE SOUTH	0.25	0	0	0.25	1	N	
03298	COLERAINE SOUTH	0.156	0	0	0.156	1	N	F
03299	COLERAINE SOUTH	0.923	0	0	0.923	1	N	D
03300	COLERAINE SOUTH	0.328	0	0	0.328	1	N	D
03301	COLERAINE SOUTH	0.313	0	0	0.313	1	N	D
03302	COLERAINE SOUTH	0.03	0	0	0.03	1	N	S

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03303	COLERAINE SOUTH	0.281	0	0	0.281	1	N	S
03304	COLERAINE SOUTH	0.113	0	0	0.113	1	N	D
03305	COLERAINE SOUTH I	0.113	0.075	0	0.188	2	N	M
03306	COLERAINE SOUTH	0.162	0.243	0	0.405	2	N	D
03307	COLERAINE SOUTH	0.06	0	0	0.06	1	N	D
03308	COLERAINE SOUTH	0.032	0	0	0.032	1	N	D
03309	COLERAINE SOUTH	0.154	0	0	0.154	1	N	D
03310	WANNON	0.031	0.045	0	0.076	2	N	D
03311	WANNON	0.085	0.128	0	0.213	2	N	D
03312	WANNON	0.022	0.014	0	0.036	1	N	S
03313	WANNON	0.036	0.024	0	0.06	1	N	S
03314	WANNON	0.338	0.225	0	0.563	H	N	D
03315	WANNON	0.063	0	0	0.063	1	N	D
03316	WANNON	0.078	0	0	0.078	1	N	D
03317	WANNON	0.023	0	0	0.023	1	N	S
03318	WANNON	0.038	0	0	0.038	1	N	S

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03319	WANNON	0.219	0	0	0.219	1	N	D
03320	WANNON	0.335	0	0	0.335	1	N	D
03321	WANNON	0.125	0	0	0.125	1	N	S
03322	WANNON	0.156	0	0	0.156	1	N	M
03323	WANNON	0.063	0	0	0.063	1	N	F
03324	WANNON	0.126	0.084	0	0.21	1	N	D
03325	WANNON	2.5	0	0	2.5	1	Y	S
03326	WANNON	0.297	0	0	0.297	1	Y	F
03327	WANNON	0.188	0	0	0.188	1	N	B
03328	WANNON	0.33	0	0	0.33	1	N	D
03329	NIGRETTA	0	0.125	0	0.125	2	N	D
03330	NIGRETTA	0	1.25	0	1.25	2	N	F
03331	DIGBY NORTH	0.236	0	0	0.236	1	N	D
03332	DIGBY NORTH	0.016	0.024	0	0.04	2	N	S
03333	DIGBY NORTH	0.056	0.084	0	0.14	2	N	D
03334	DIGBY NORTH	0.775	1.163	0	1.938	2	N	D

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03335	DIGBY NORTH	0.063	0	0	0.063	1	N	D
03336	DIGBY NORTH	0.625	0	0	0.625	1	N	D
03337	DIGBY NORTH	0.66	0	0	0.66	1	N	D
03338	DIGBY NORTH	0.143	0.036	0	0.179	1	N	D
03339	DIGBY NORTH	0.5	0	0	0.5	1	N	F
03340	DIGBY NORTH	1.35	0	0	1.35	1	N	D
03341	DIGBY NORTH	0.023	0	0	0.023	1	N	D
03342	DIGBY NORTH	0.032	0	0	0.032	1	N	D
03343	DIGBY NORTH	0.06	0	0	0.06	1	N	S
03344	DIGBY NORTH	0.14	0	0	0.14	1	N	S
03345	DIGBY NORTH	0.094	0	0	0.094	1	N	D
03346	DIGBY NORTH	0.063	0	0	0.063	1	N	D
03347	DIGBY NORTH	0.52	0	0	0.52	1	N	D
03348	DIGBY NORTH	0.343	0.147	0	0.49	1	N	D
03349	DIGBY NORTH	0	0.433	0	0.433	1	N	D
03350	DIGBY NORTH	0.046	0.048	0	0.094	1	N	D

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03351	DIGBY NORTH	0.291	0	0	0.291	1	N	D
03352	DIGBY NORTH	0.125	0	0	0.125	1	N	D
03353	DIGBY NORTH	0.245	0	0	0.245	1	N	D
03354	DIGBY NORTH	0.17	0	0	0.17	1	N	D
03355	DIGBY NORTH	0.046	0.02	0	0.065	1	N	F
03356	DIGBY NORTH	l.47	0.63	0	2.1	1	N	F
03357	DIGBY NORTH	0.01	0.004	0	0.014	I	N	F
03358	DIGBY NORTH	0.563	0	0	0.563	1	N	D
03359	DIGBY NORTH	0.271	0.027	0	0.298	1	N	D
03360	DIGBY NORTH	0.063	0	0	0.063	I	N	
03361	DIGBY NORTH	0.598	0	0	0.598	1	N	S
03362	DIGBY NORTH	0.31	0	0	0.31	1	N	S
03363	DIGBY NORTH	0.125	0	0	0.125	1	Y	S
03364	DIGBY NORTH	0.733	0	0	0.733	1	Y	D
03365	DIGBY NORTH	0.188	0	0	0.188	1	Y	D
03366	DIGBY NORTH	0.675	0.45	0	1.125	1	N	S

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03367	DIGBY NORTH	0.35	0.15	0	0.5	1	N	D
03368	DIGBY NORTH	0.01	0	0	0.01	1	N	S
03369	DIGBY NORTH	0.055	0	0	0.055	1	Y	D
03370	DIGBY NORTH	1.581	0.044	0	1.625	1	N	D
03371	DIGBY NORTH	3.403	2.25	0	5.653	1	Y	D
03372	DIGBY NORTH	1.268	0	0	1.268	I	N	D
03373	DIGBY NORTH	0.688	0	0	0.688	1	S	D
03374	DIGBY NORTH	1.204	0.496	0	1.7	1	S	F
03375	DIGBY NORTH	0.438	0	0	0.438	1	N	D
03376	DIGBY NORTH	0.156	0	0	0.156	H	N	F
03377	DIGBY NORTH	0.645	0.09	0	0.735	H	N	D
03378	DIGBY NORTH	0.938	0	0	0.938	1	N	S
03379	DIGBY NORTH	0.28	0.225	0	0.505	I	N	D
03380	DIGBY NORTH	0.135	0	0	0.135	1	N	D
03381	DIGBY NORTH	0.165	0	0	0.165	1	N	D
03382	DIGBY NORTH	0.309	0	0	0.309	1	N	D

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03383	DIGBY NORTH	0.578	0	0	0.578	1	N	D
03384	DIGBY NORTH	0.202	0	0	0.202	1	N	D
03385	DIGBY NORTH	0	0.5	0	0.5	2	Y	
03386	DIGBY NORTH	0.25	0	0	0.25	I	N	D
03387	DIGBY NORTH	0.012	0	0	0.012	1	N	S
03388	DIGBY NORTH	0	0.014	0	0.014	2	N	S
03389	DIGBY NORTH	0.619	0.069	0	0.688	1	N	D
03390	DIGBY NORTH	0.169	0.113	0	0.281	H	N	F
03391	DIGBY NORTH	0.188	0	0	0.188	1	N	D
03392	DIGBY NORTH	0.313	0	0	0.313	1	N	F
03393	DIGBY NORTH	0.282	0.283	0	0.563	1	N	D
03394	DIGBY NORTH	0.25	0	0	0.25	I	N	D
03395	DIGBY NORTH	0.125	0	0	0.125	1	N	D
03396	DIGBY NORTH	0.126	0.124	0	0.25	H	N	D
03397	STOKES RIVER	0.11	0.109	0	0.219	I	N	D
03398	HEATH POINT	0.01	0.014	0	0.024	2	N	D

SITE No	MAP_NAME	CLASS_1	CLASS_2	CLASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03399	HEATH POINT	0.067	0.008	0	0.075	1	N	F
03400	HEATH POINT	0.26	0	0	0.26	1	N	D
03401	HEATH POINT	1.188	0	0	1.188	1	N	
03402	HEATH POINT	0.6	0	0	0.6	1	N	F
03403	HEATH POINT	1.935	0.83	0	2.765	1	N	F
03404	HEATH POINT	0.08	0	0	0.08	1	N	
03405	HEATH POINT	0.25	0	0	0.25	1	N	F
03406	HEATH POINT	0.225	0	0	0.225	1	N	F
03407	HEATH POINT	0.22	0	0	0.22	1	N	D
03408	COLERAINE SOUTH	1.234	0.206	0	1.44	1	N	D
03409	HEATH POINT	0.35	0	0	0.35	1	N	. B
03410	HEATH POINT	0.028	0	0	0.028	1	N	D
03411	HEATH POINT	0.014	0	0	0.014	1	N	F
03412	HEATH POINT	4.336	1.084	0	5.42	1	N	F
03413	HEATH POINT	0.14	0	0	0.14	1	N	B
03414	HEATH POINT	0.12	0	0	0.12	1	N	D

SITE No	MAP_ NAME	CLASS_1	CLASS_2	C LASS_3	TOTAL_AREA	SEVERITY	TREATDSCR	POSITION
03415	HEATH POINT	0.01	0	0	0.01	1	N	D
03416	HEATH POINT	0.28	0.12	0	0.4	1	N	D
03417	HEATH POINT	1.75	0.438	0	2.188	1	N	D
		260.598	43.687	0.001	304.272			