

SOCIAL ATLAS: SOUTHERN RIVERS CATCHMENT MANAGEMENT AUTHORITY

NATURAL RESOURCE MANAGEMENT BENCHMARKING



Report prepared for:
Southern Rivers Catchment Management Authority
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New South Wales 2500
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1. INTRODUCTION

The Southern Rivers Catchment Management Authority (SRCMA) is one of 13 regional NRM bodies in NSW. The CMAs were established in 2004 and each CMA has developed a Catchment Action Plan (CAP) and Investment Strategies to support the management of natural resources and achievement of NRM targets within each region.

In achieving the NRM targets as identified in the CAP, community capacity building and engagement are integral activities which need to be undertaken to *enable* the achievement of core NRM targets and objectives. These enabling activities, which lead to intermediate outcomes within the program logic of NRM, include for example increasing community awareness and knowledge of NRM issues and increased participation and involvement in NRM activities. By increasing community capacity and by increasing the involvement of the community more broadly in NRM, the greater the likelihood that the resource condition targets, as identified in the CAP are able to be achieved.

Data included in the social atlas is based on a survey of rural landholders within the SRCMA and shows the spatial variation in landholder responses to survey questions. An additional report¹ which accompanies the social atlas provides a more detailed non-spatial analysis of landholder responses to survey questions.

The social atlas provides the basis for benchmarking the existing level of community attitudes, awareness and involvement in NRM in the SRCMA and will form a reference point for ongoing monitoring and evaluation of the CMA's community engagement and capacity building. The atlas is descriptive for a single point in time and has not been developed with the intention of predicting or explaining community attitudes, awareness and involvement in NRM.

¹ Fenton, D.M. (2008). *Social benchmarking of landholder involvement in NRM*. Southern Rivers CMA.

The information presented in the social atlas also provides benchmarking information against which to assess progress in relation to two key management action targets as identified in the CAP², which include:

C1 – Engagement

By 2016 there is an increase in the number of people engaged in collaborative actions to deliver improved natural resource management.

C2 – Capacity and Practices

By 2016 there is an increase in community awareness, knowledge and skills in relation to NRM as demonstrated by an increase in the adoption of practices that improve natural resource outcomes.

² Southern Rivers CMA (2006). *Catchment Action Plan*. Southern Rivers CMA.

2. SOCIAL ATLAS

The social atlas presented in this document is an additional report which accompanies the main report. The main project report describes the project methodology, analysis and findings in greater detail³. The social atlas is based on the data as presented in the main report and presents the key variables spatially across the Southern Rivers region.

When examining the variables presented in the atlas, it is important to recognise that no assessment has been undertaken to determine whether the spatial variation that is presented is 'accurate'. To a large extent an assessment of the accuracy of the spatial representation of individual variables will be dependent upon the more detailed local knowledge of CMA staff and others with knowledge of the region.

For instance Map 71 shows the variation in property sizes within the Southern Rivers region and indicates that the larger properties are in the Snowy-Monaro and Upper Shoalhaven regions. While the spatial variation presented in Map 71 appears to accurately represent the spatial variation evident in the region, the accuracy of the spatial variation presented in other maps is not always as clear. Judgments of 'accuracy' would in all cases be dependent upon local knowledge of the variable being represented.

Map 1 for instance shows the spatial variation amongst landholders who indicate that salinity is an issue on their property. As shown in Map 1 this appears to be very much an issue in the Snowy-Monaro and Shoalhaven sub regions with the highest percentages of landholders reporting this issue being around Dalgety and Nowra. However, the 'accuracy' of the spatial variation as presented in Map 1 can only be assessed by those with good local knowledge of soil condition throughout the region.

³ Fenton, D.M. (2008). *Social benchmarking of landholder involvement in NRM*. Southern Rivers CMA.

Figure 1 shows the six SRCMA sub regions and 19 sample areas on which the atlas is based. To a large extent the number and location of sample areas was dependent upon the population size of rural landholders, although the boundary of spatial units were also reviewed by CMA staff.

Landholders were identified from the digital white pages⁴ and through their address details were assigned to each of the 19 spatial units. As the last available digital white pages was from 2004, telephone numbers one above and one below the telephone number identified in the digital white pages were also selected. Through this process the more recent telephone numbers were included.

While an examination of the address associated with the initial telephone number was the best estimate of the location of the respondent and whether the respondent was likely to be a rural landholder, the first interview question asked whether the respondent "owned, lived on or looked after a farm or rural property". If the response to this question was negative, the interview was concluded.

All landholders were also asked the nearest town and the nearest road to their property and this was also used to ensure the landholders were assigned to the appropriate sub region and sample areas.

While an initial attempt was made to obtain 333 interviews from within each of the six sub regions, with an equal distribution of landholders from each of the sample areas within sub regions, in several instances there were insufficient phone numbers through which to achieve this target.

Table 1 shows the final sample counts for the six sub regions and each of the sample areas. While the target sample for the SRCMA region was 2,000, Table 1

⁴ The 2004 digital white pages telephone directory was the last year a digital directory of all phone numbers in Australia was publicly available.

shows the final sample count to be 1,953. The lower final sample count was due to 47 landholder interviews being undertaken where it was later identified that their properties were outside the SRCMA region.

Table 1. Sample sizes for spatial units

Spatial unit	Sample Size
Bega	
B1	129
B2	79
B3	260
B4	124
Total	592
Eurobodalla	
E1	83
E2	107
Total	190
Illawarra	
I1	113
I2	78
Total	191
Shoalhaven	
S1	80
S2	153
S3	54
S4	84
Total	371
Snowy-Monaro	
SM1	135
SM2	56
SM3	87
SM4	53
Total	331
Upper Shoalhaven	
U1	38
U2	176
U3	64
Total	278
Total SRCMA region	1,953

A. SUB REGIONS AND SAMPLE AREAS



Sample sizes within sub regions



Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



Sample sizes within sample areas



Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



1. PERCENT REPORTING SALINITY



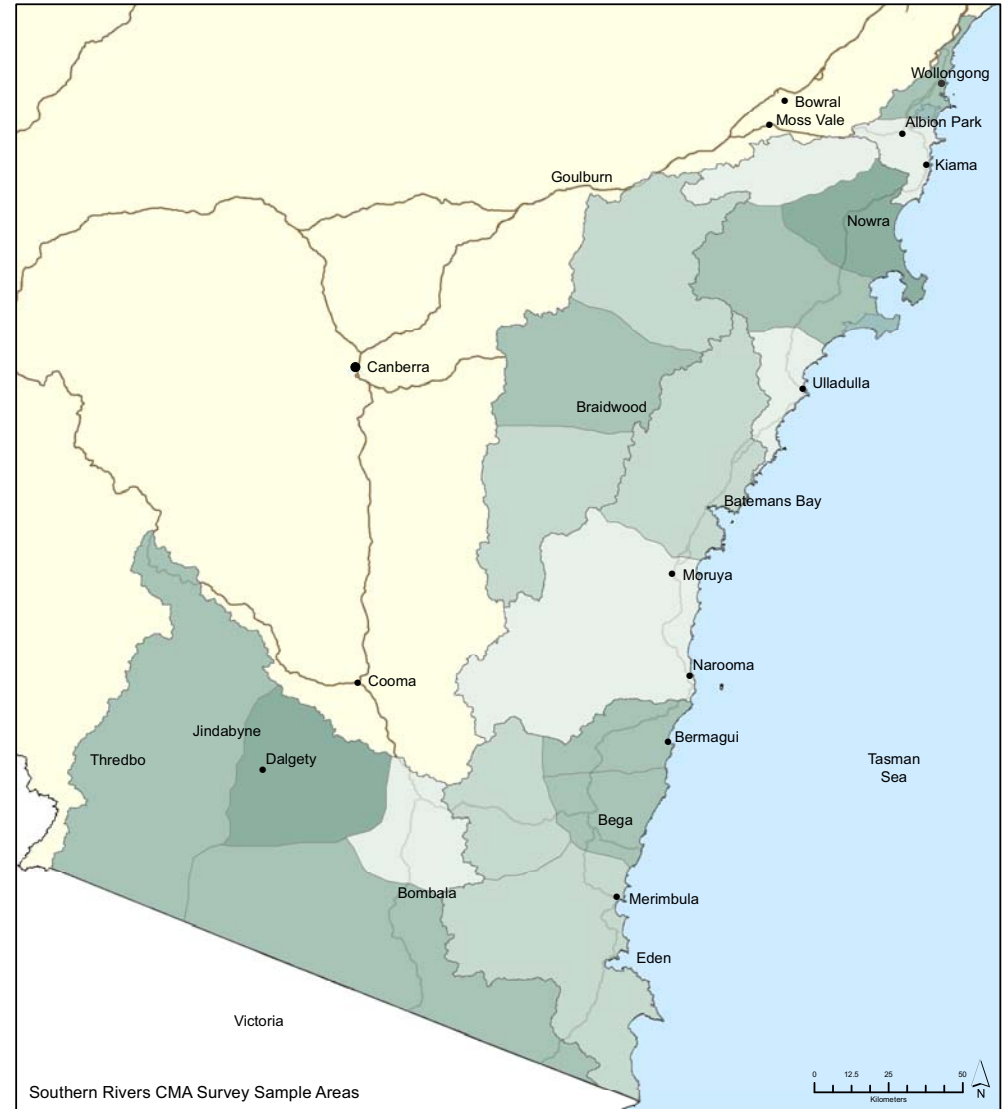
Question: "Could you tell me if [salinity] is a problem that has occurred on your land in the last two years?"

Percent within each sub-region

7.9	Eurobodalla
18.7	Upper Shoalhaven
19.4	Illawarra
21.8	Bega
23.2	Shoalhaven
24.5	Snowy-Monaro

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



Question: "Could you tell me if [salinity] is a problem that has occurred on your land in the last two years?"

Percent within each sample area

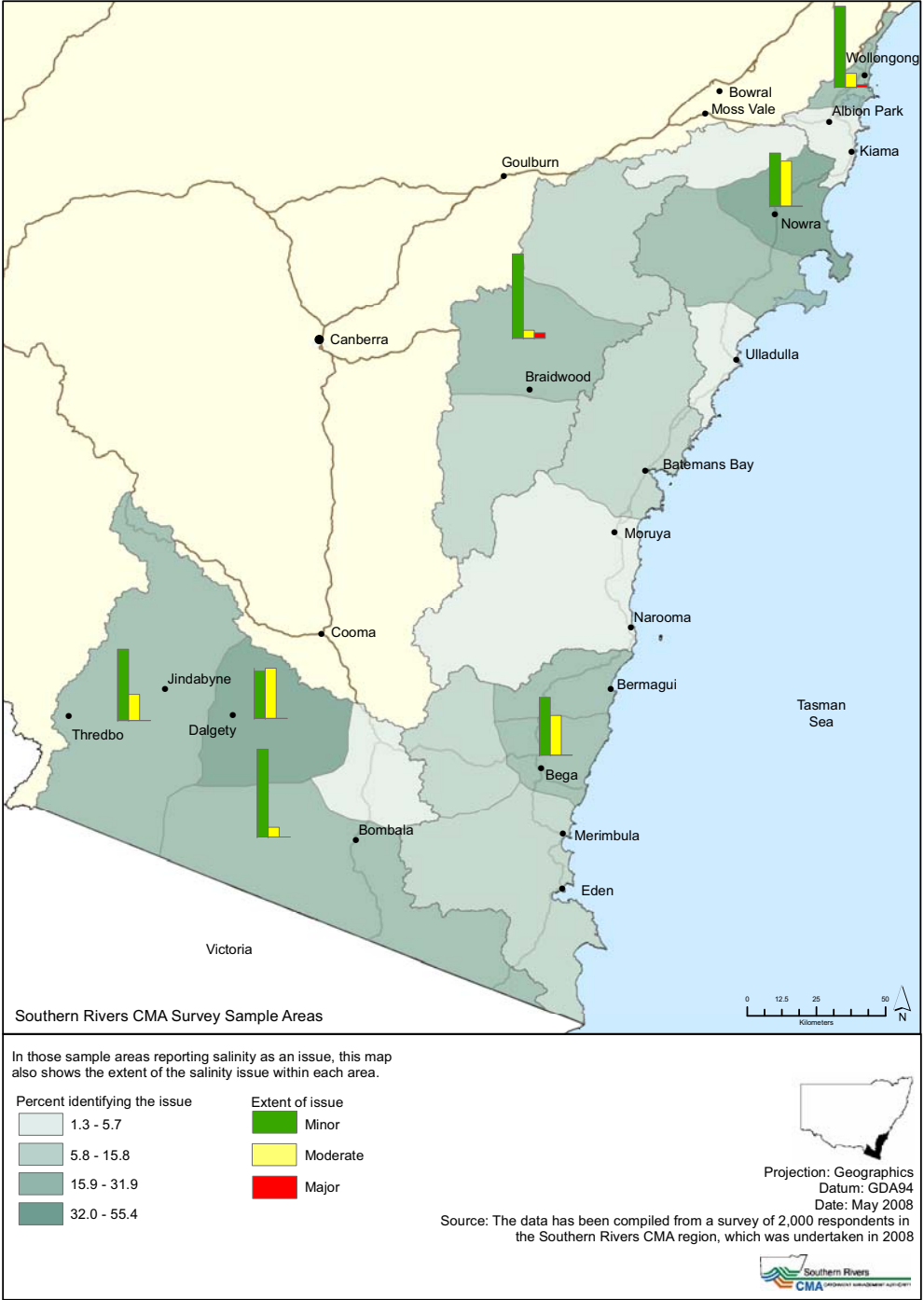
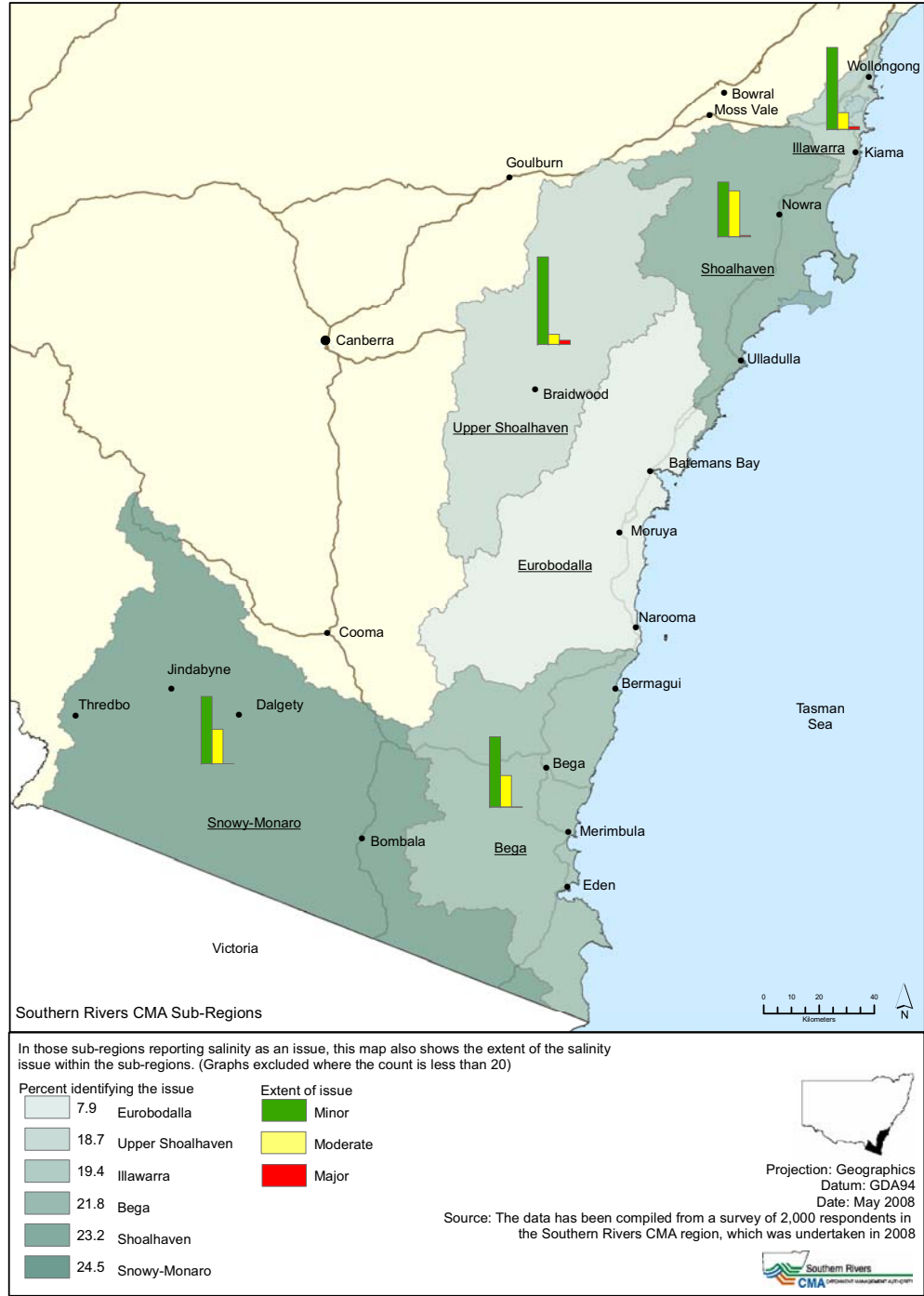
1.3 - 5.7
5.8 - 15.8
15.9 - 31.9
32.0 - 55.4

Projection: Geographics
Datum: GDA94
Date: May 2008

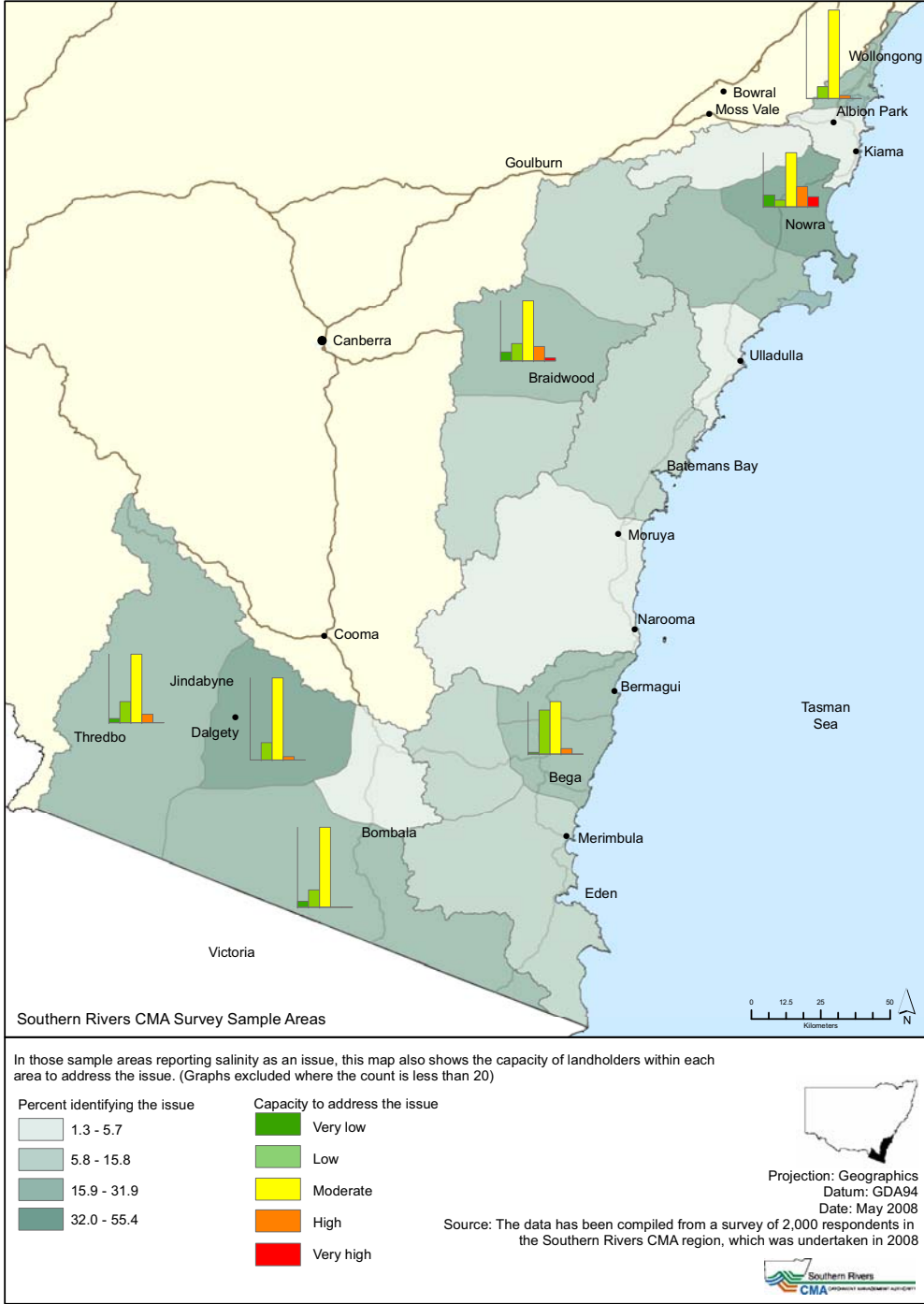
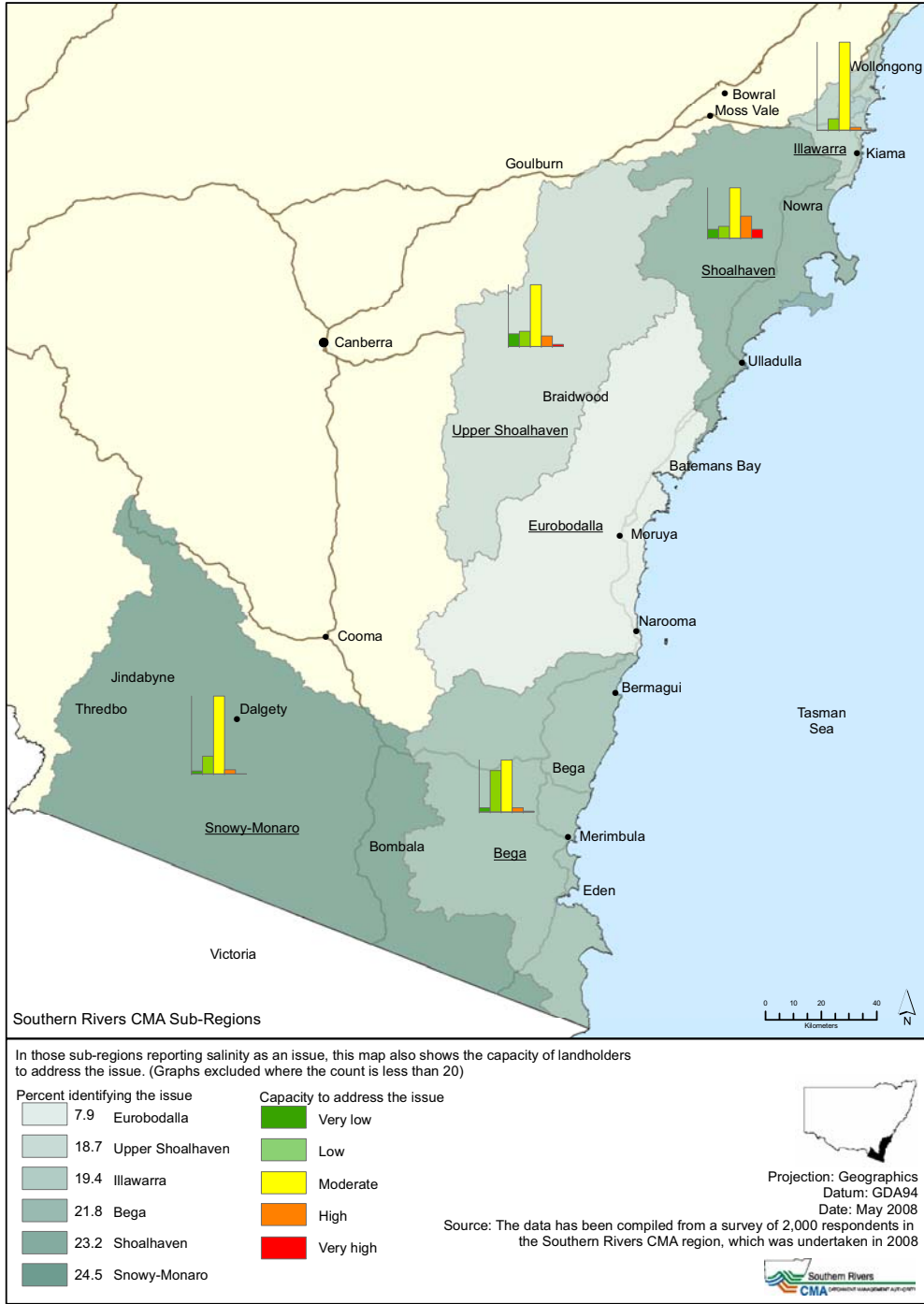
Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



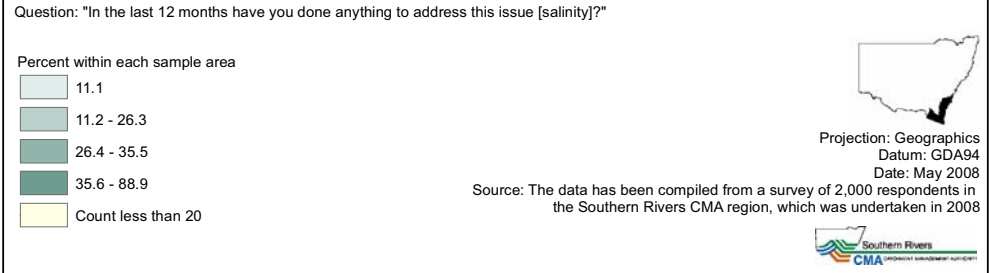
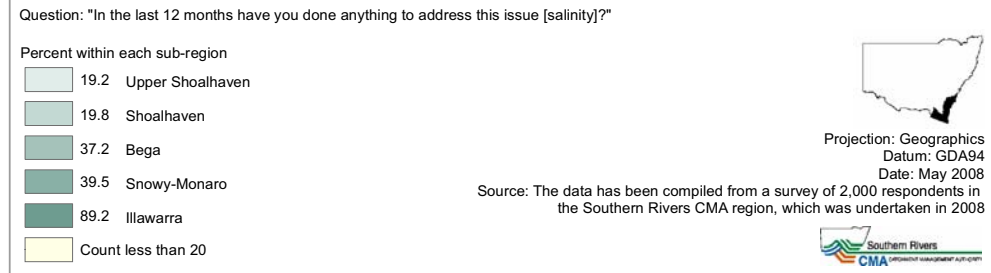
2. EXTENT OF SALINITY ISSUE



3. CAPACITY TO ADDRESS SALINITY



4. PERCENT UNDERTAKING ACTION TO ADDRESS SALINITY



5. PERCENT REPORTING SOIL EROSION (inc. erosion to stream beds, banks and gullies)



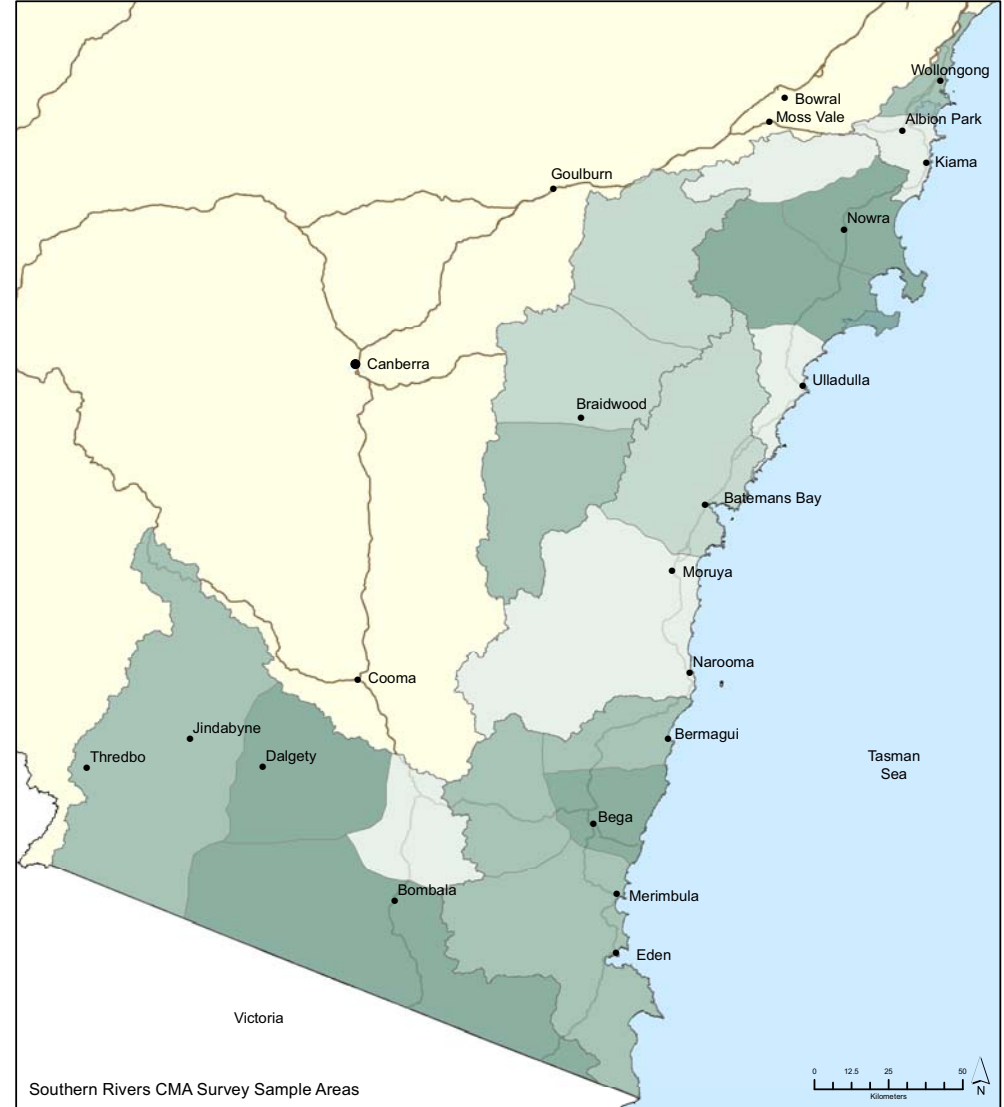
Question: "Could you tell me if [soil erosion, including erosion to stream beds, banks and gullies] is a problem that has occurred on your land in the last two years?"

Percent within each sub-region

29.5	Eurobodalla
34.0	Illawarra
35.3	Shoalhaven
38.1	Upper Shoalhaven
47.3	Bega
48.9	Snowy-Monaro

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



Question: "Could you tell me if [soil erosion, including erosion to stream beds, banks and gullies] is a problem that has occurred on your land in the last two years?"

Percent within each sample area

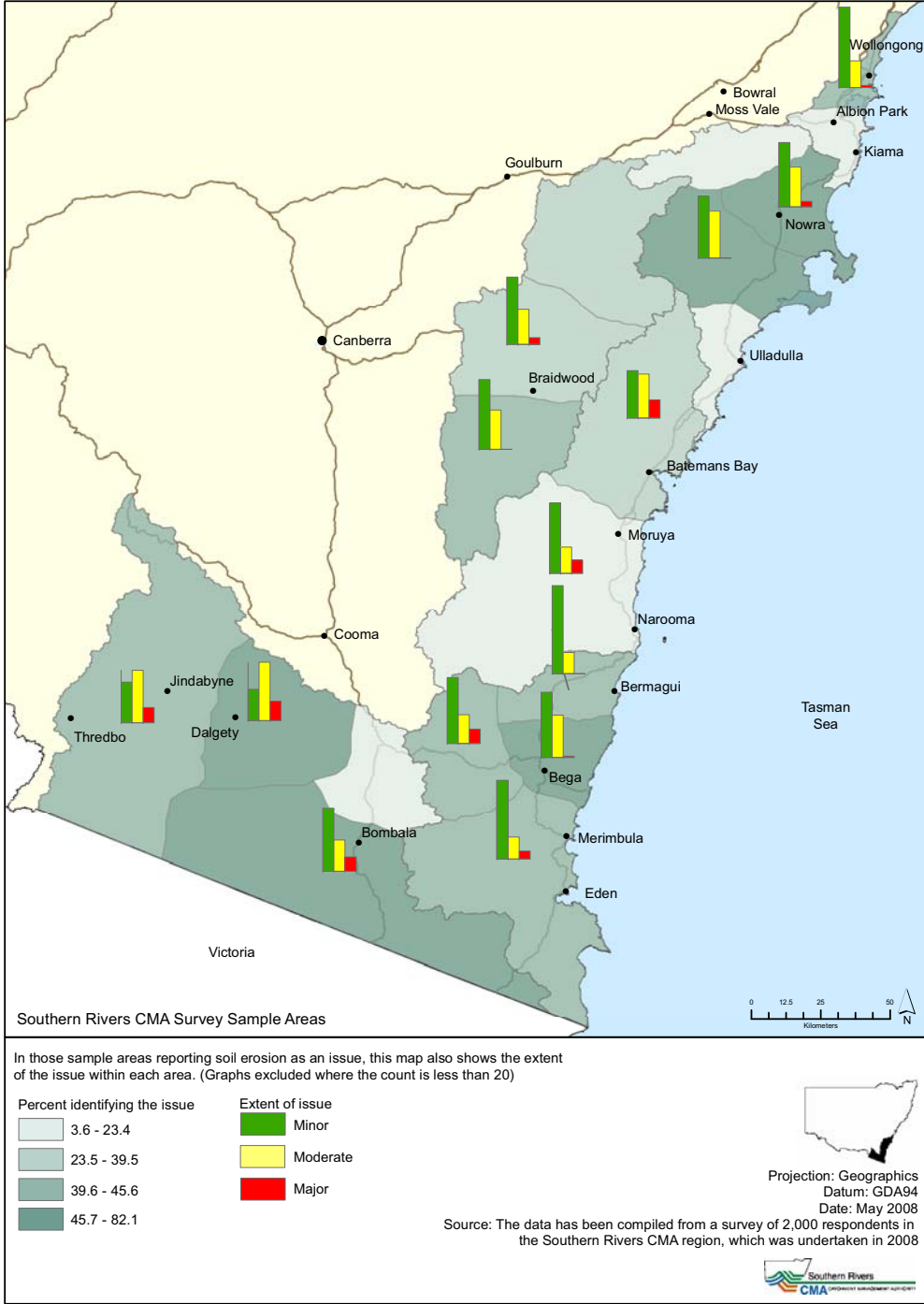
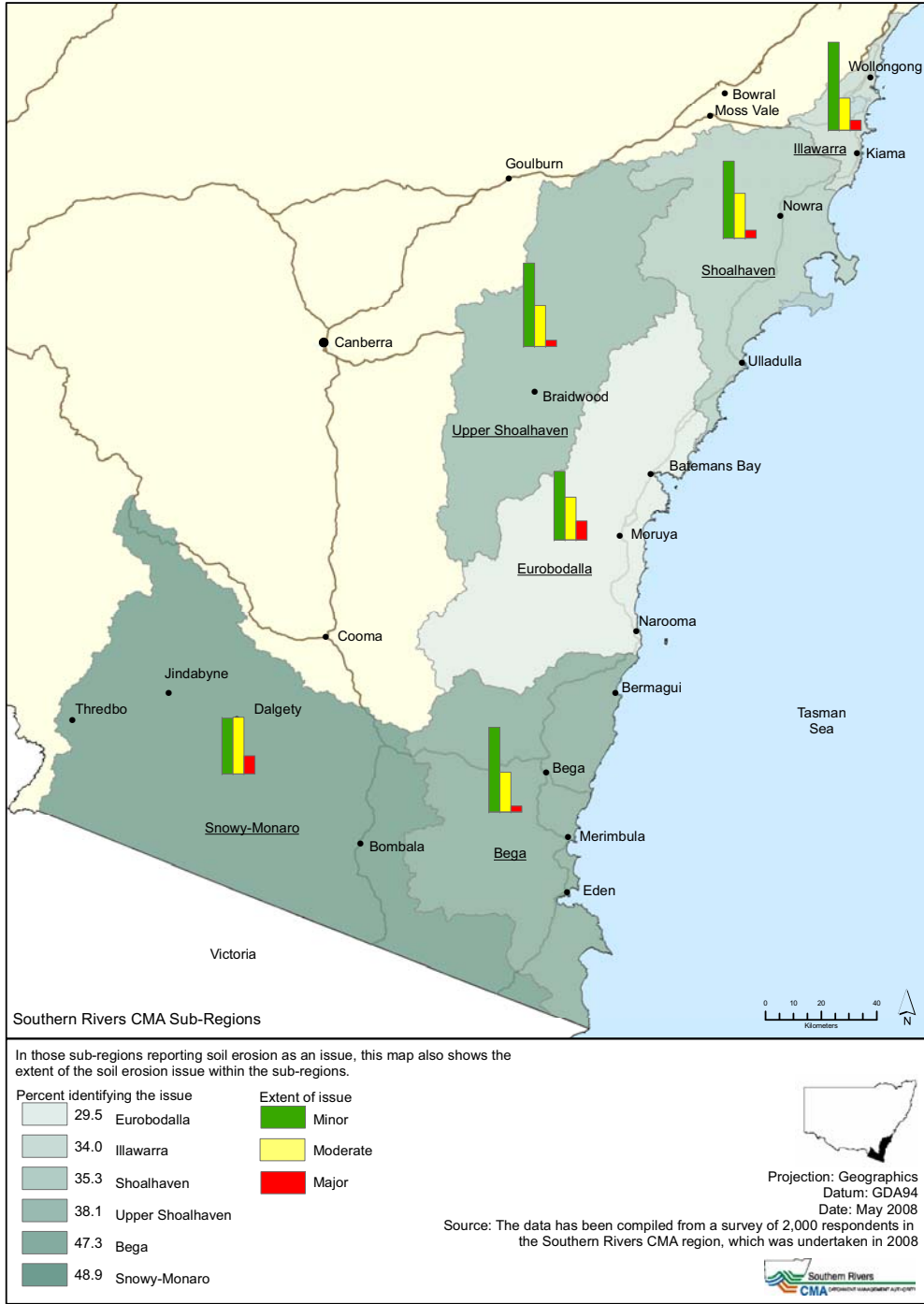
3.6 - 23.4
23.5 - 39.5
39.6 - 45.6
45.7 - 82.1

Projection: Geographics
Datum: GDA94
Date: May 2008

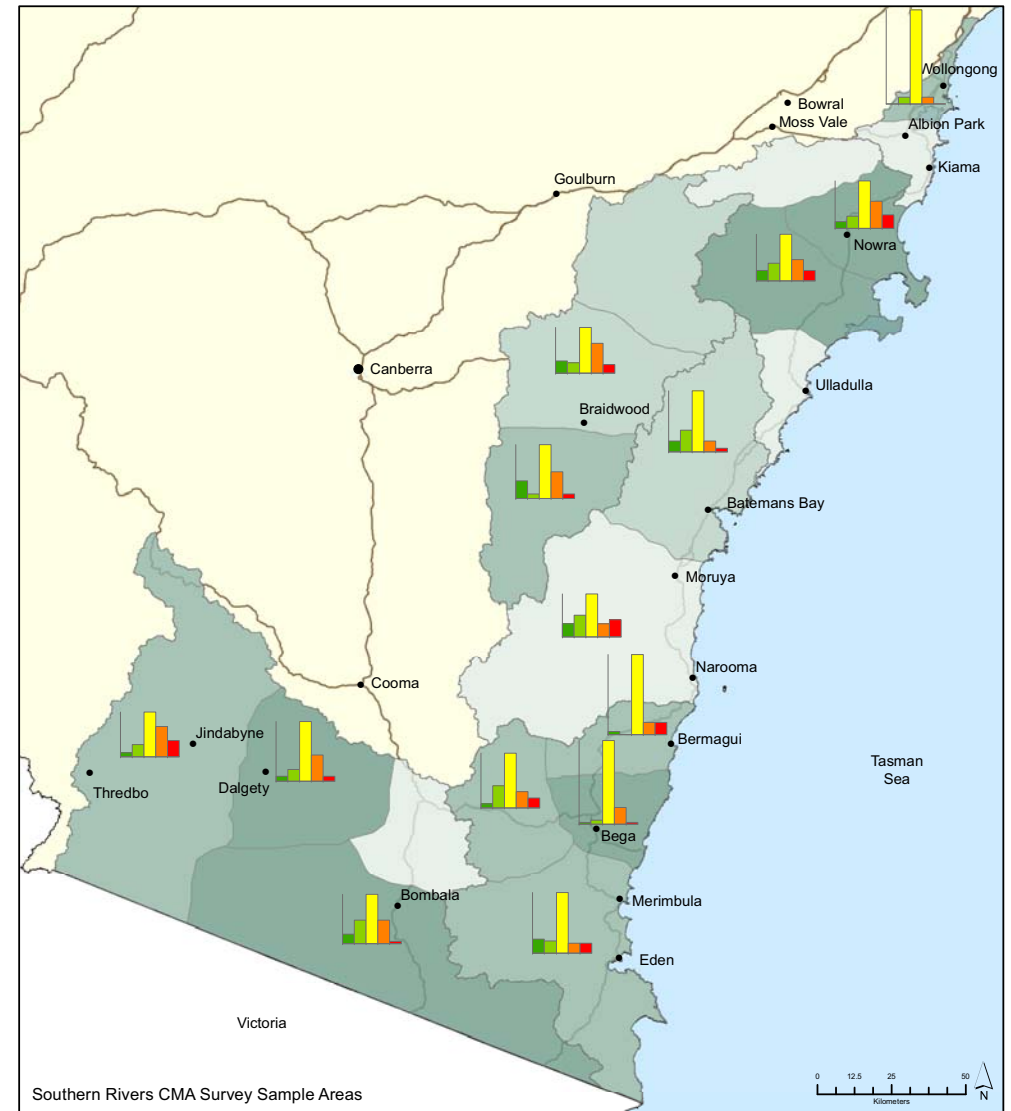
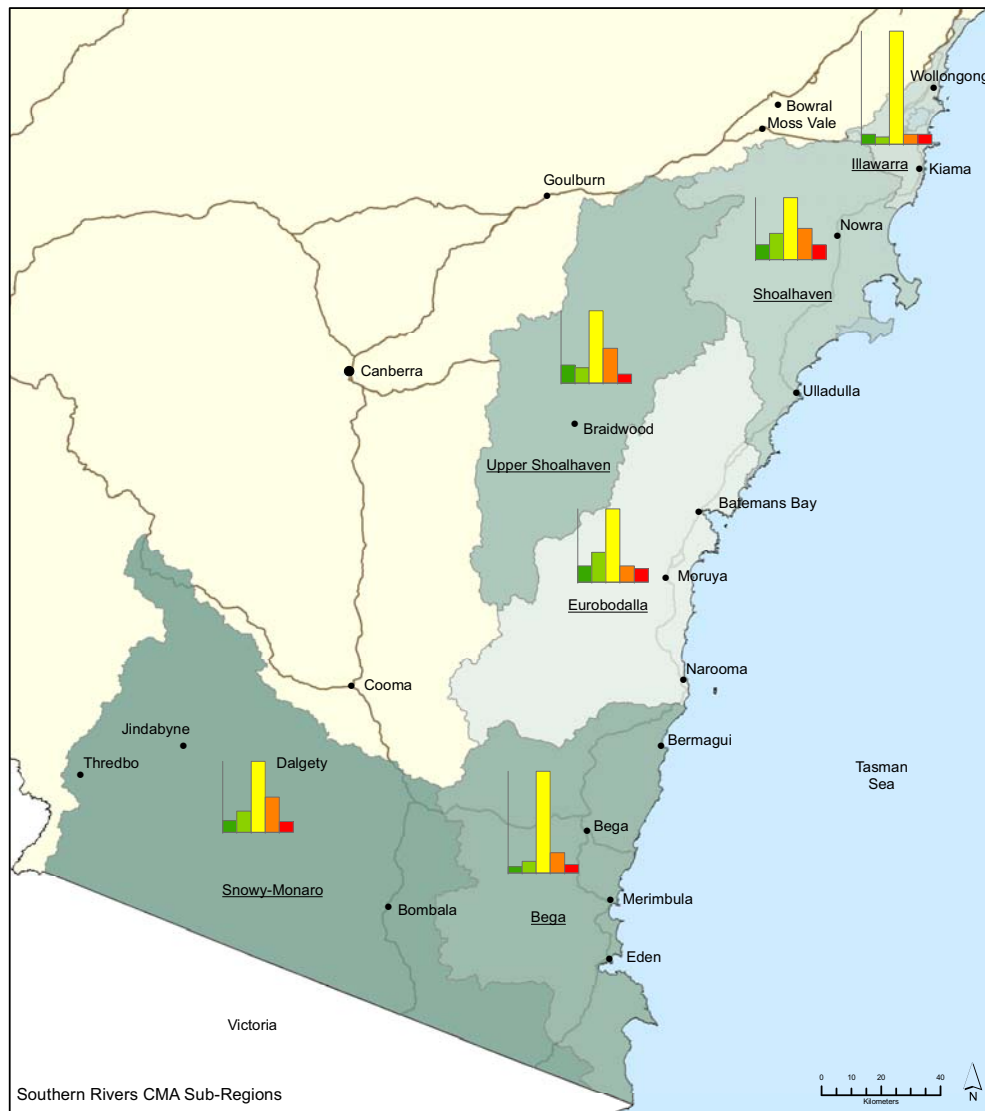
Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



6. EXTENT OF ISSUE WITH SOIL EROSION



7. CAPACITY TO ADDRESS SOIL EROSION



8. PERCENT UNDERTAKING ACTIONS TO ADDRESS SOIL EROSION



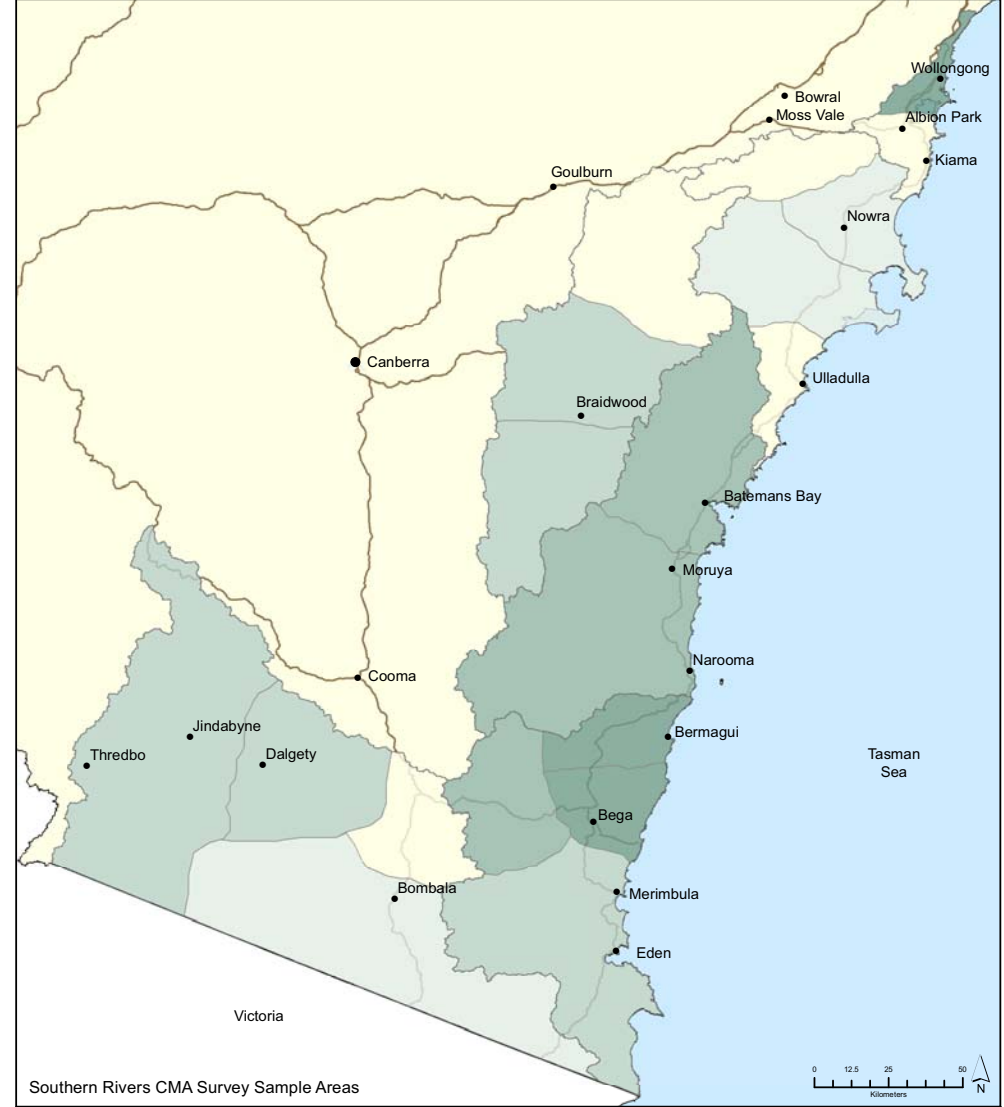
Question: "In the last 12 months have you done anything to address this issue [soil erosion]?"

Percent within each sub-region

58.8	Shoalhaven
62.3	Upper Shoalhaven
64.8	Snowy-Monaro
75.0	Eurobodalla
83.2	Bega
86.2	Illawarra

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



Question: "In the last 12 months have you done anything to address this issue [salinity]?"

Percent within each sample area

60.0 - 62.5
62.6 - 70.4
70.5 - 77.4
77.5 - 90.5
Count less than 20

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



9. PERCENT REPORTING WEEDS



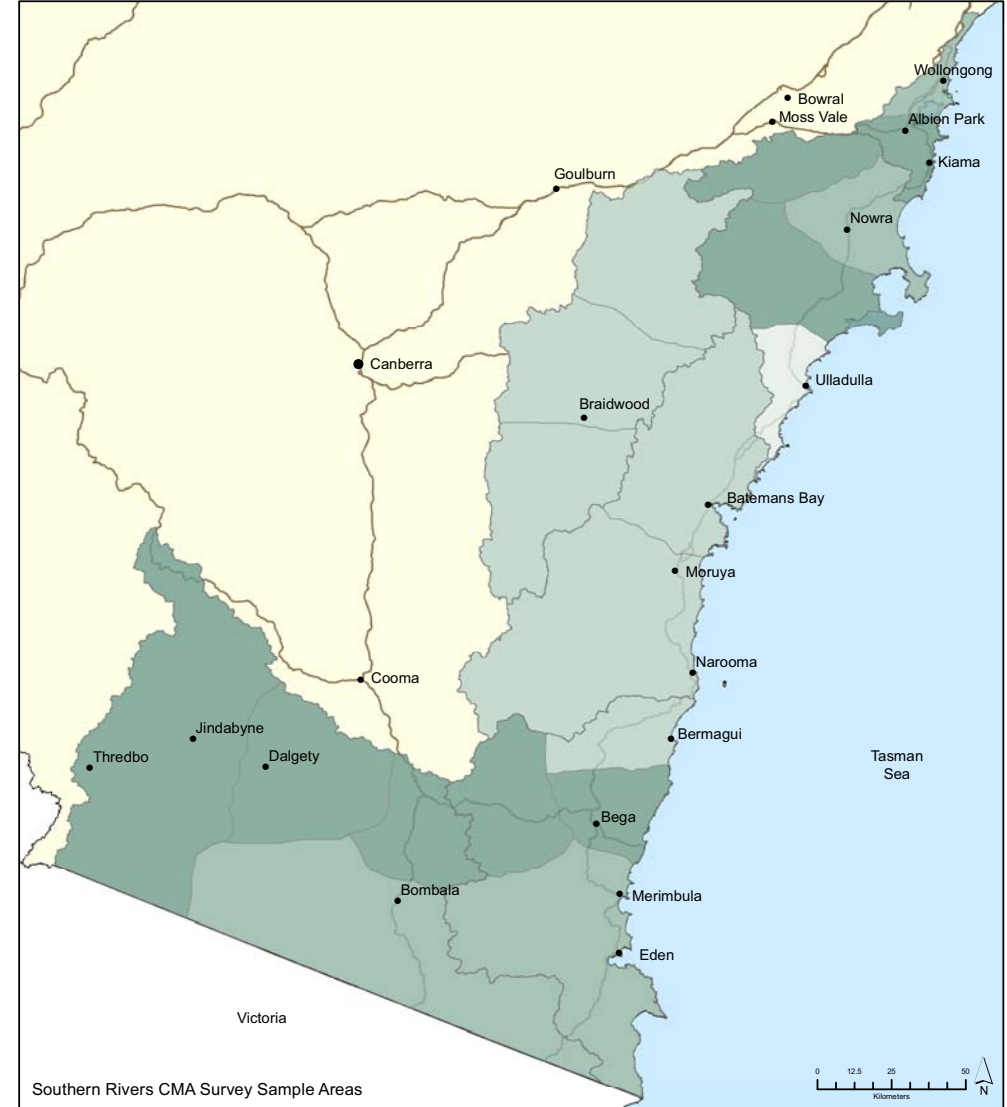
Question: "Could you tell me if [weeds] is a problem that has occurred on your land in the last two years?"

Percent within each sub-region

57.9	Upper Shoalhaven
60.0	Eurobodalla
72.5	Shoalhaven
78.0	Illawarra
79.4	Bega
83.7	Snowy-Monaro

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



Question: "Could you tell me if [weeds] is a problem that has occurred on your land in the last two years?"

Percent within each sample area

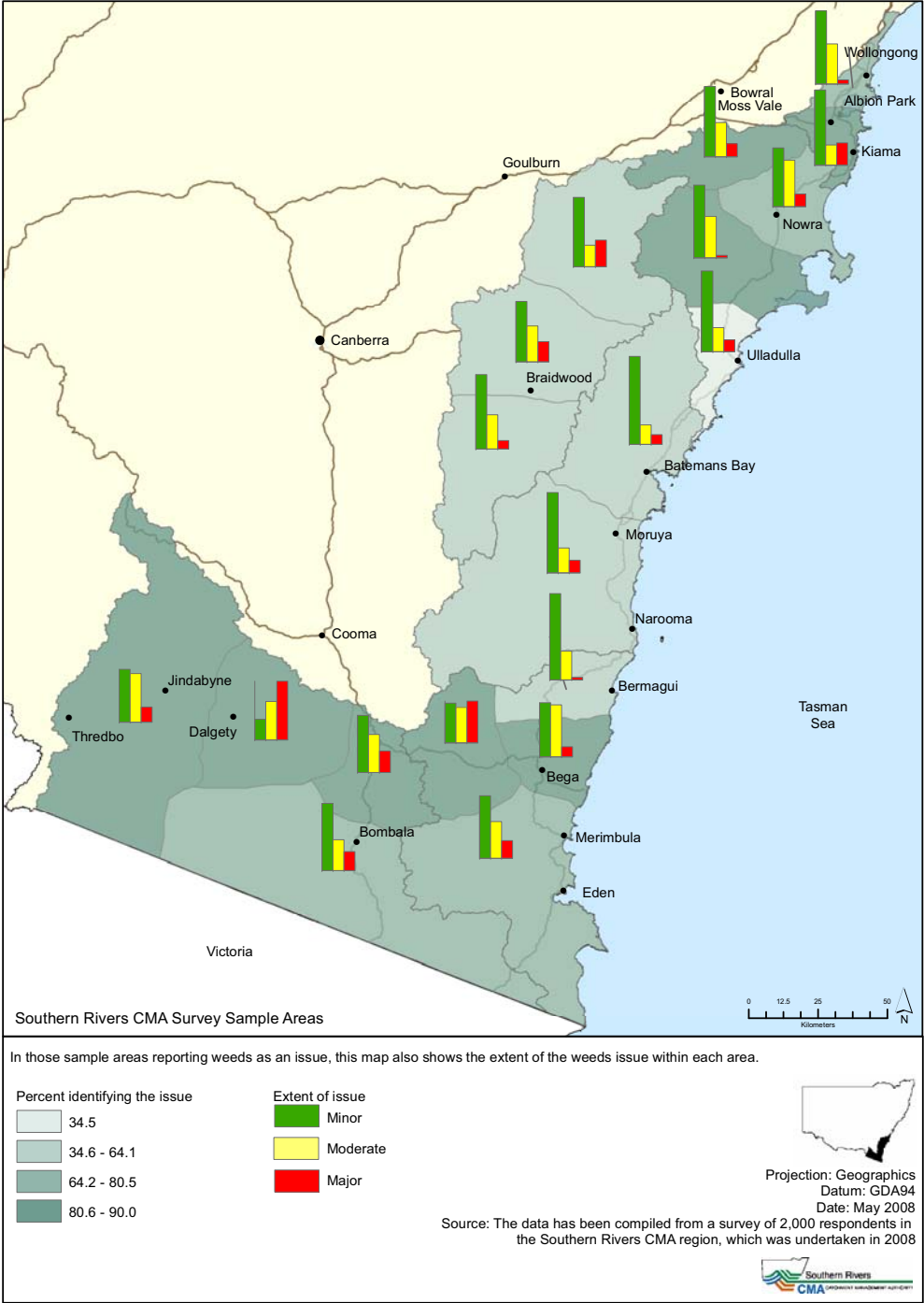
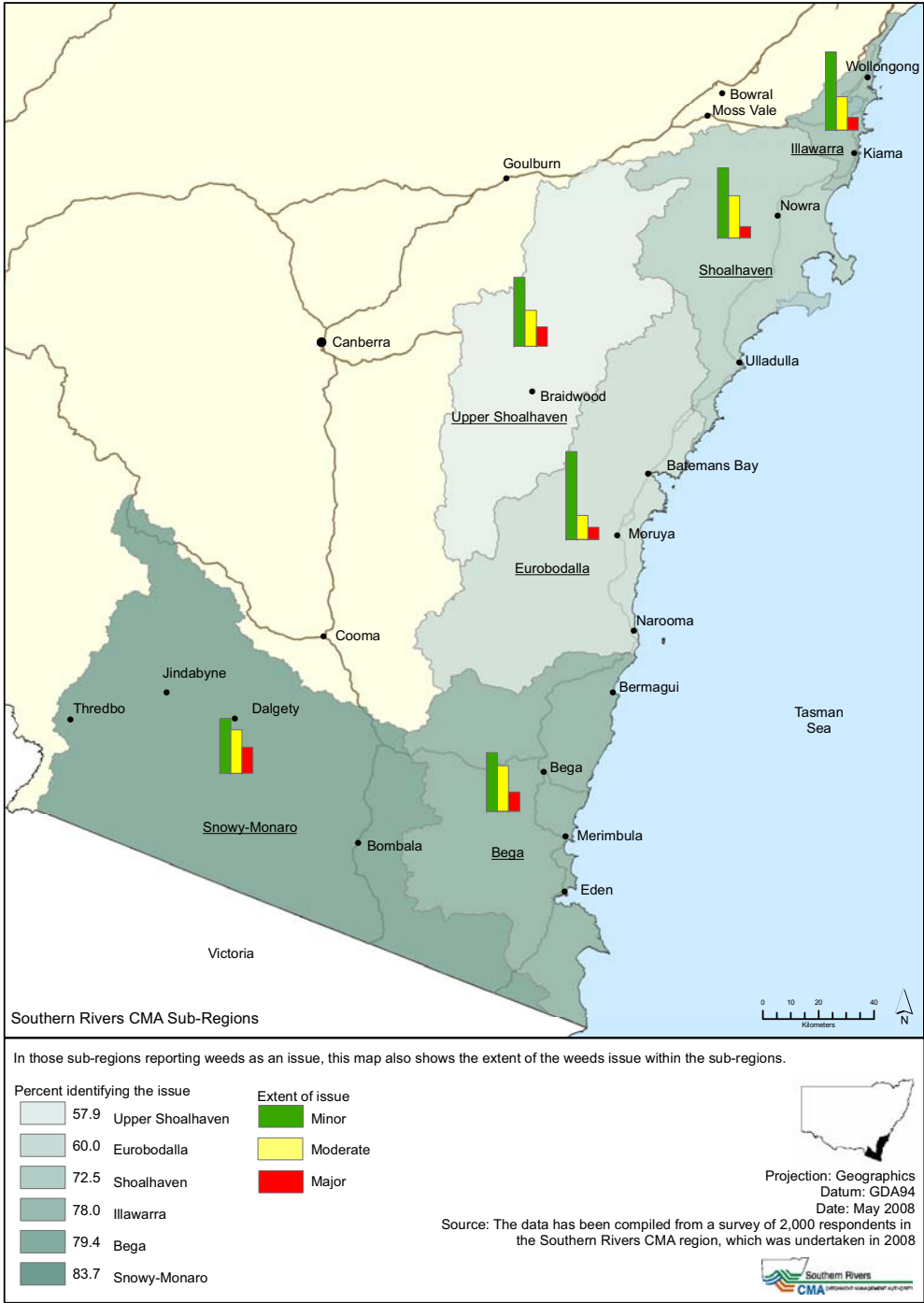
34.5
34.6 - 64.1
64.2 - 80.5
80.6 - 90.0

Projection: Geographics
Datum: GDA94
Date: May 2008

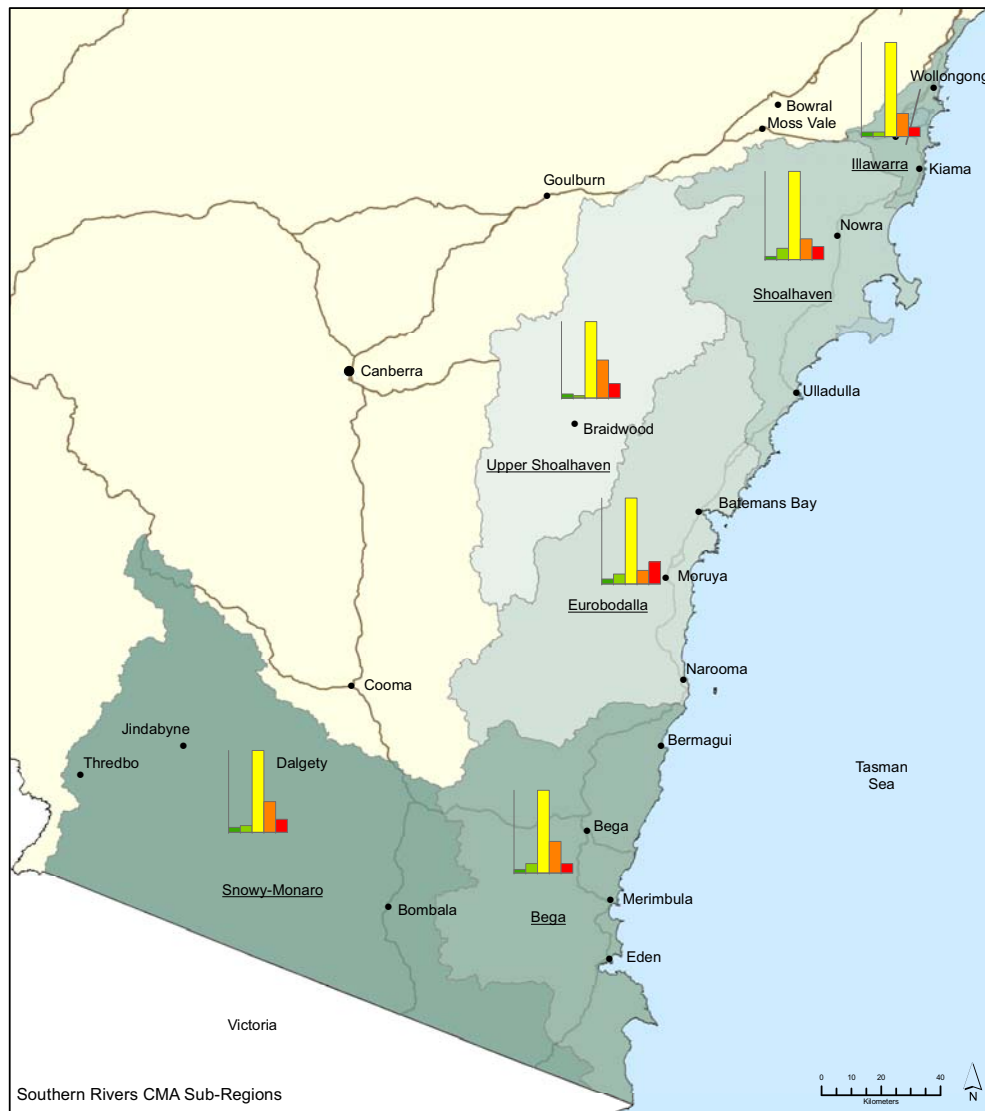
Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



10. EXTENT OF WEEDS AS AN ISSUE



11. CAPACITY TO ADDRESS WEEDS

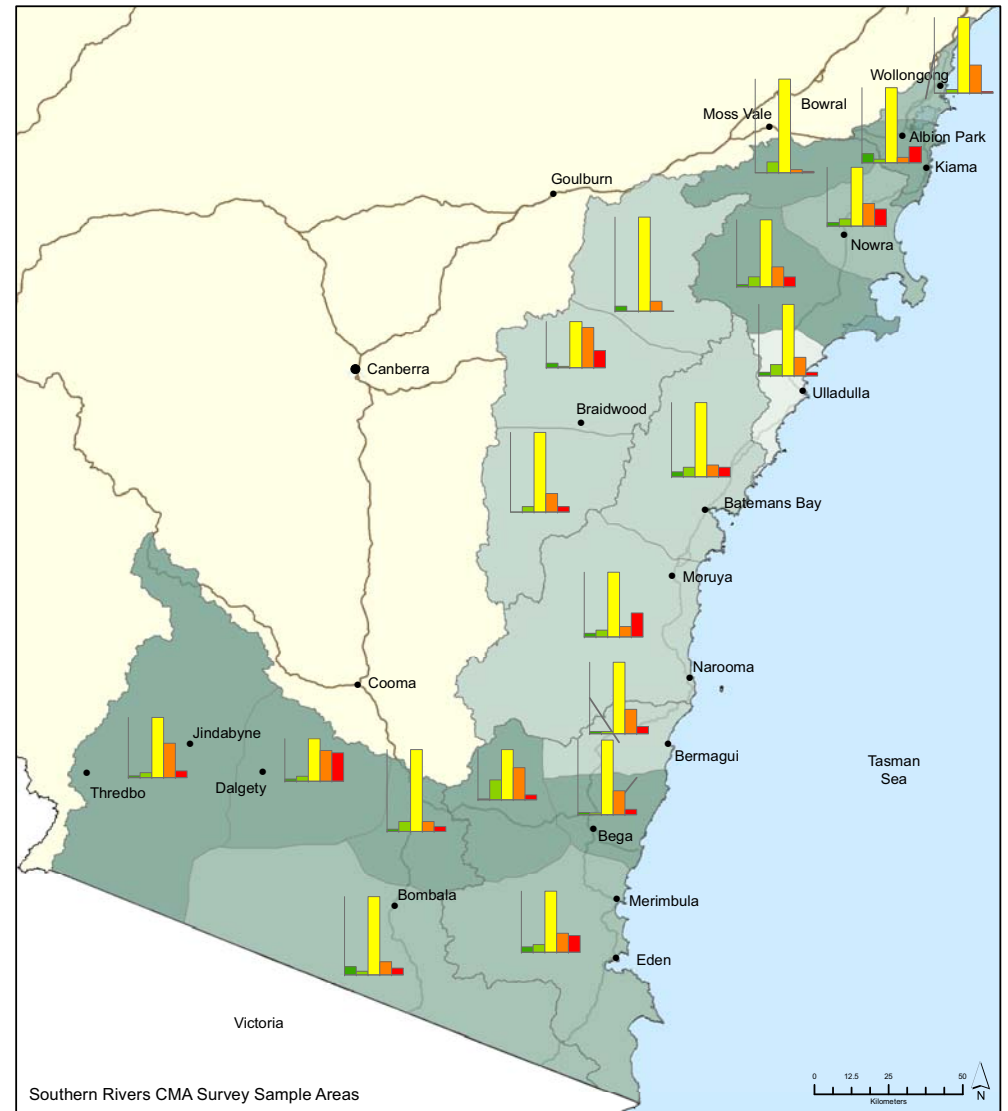


In those sub-regions reporting weeds as an issue, this map shows the capacity of landholders to address the issue.

Percent identifying the issue	Capacity to address the issue
57.9 Upper Shoalhaven	Very low
60.0 Eurobodalla	Low
72.5 Shoalhaven	Moderate
78.0 Illawarra	High
79.4 Bega	Very high
83.7 Snowy-Monaro	

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008

Projection: Geographics
Datum: GDA94
Date: May 2008



In those areas reporting weeds as an issue, this map shows the capacity of landholders to address the issue.

Percent identifying the issue	Capacity to address the issue
34.5	Very low
34.6 - 64.1	Low
64.2 - 80.5	Moderate
80.6 - 90.0	High
	Very high

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008

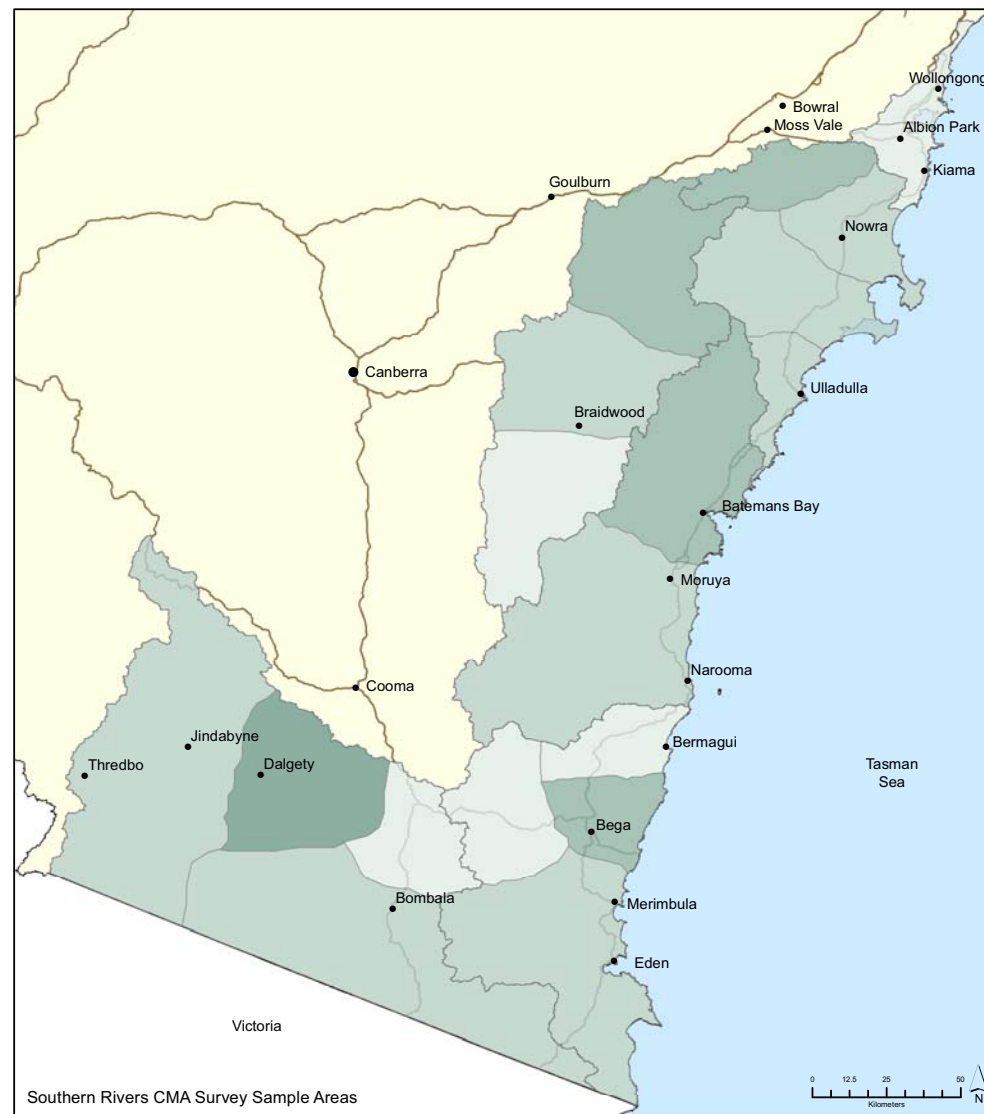
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Date: May 2008



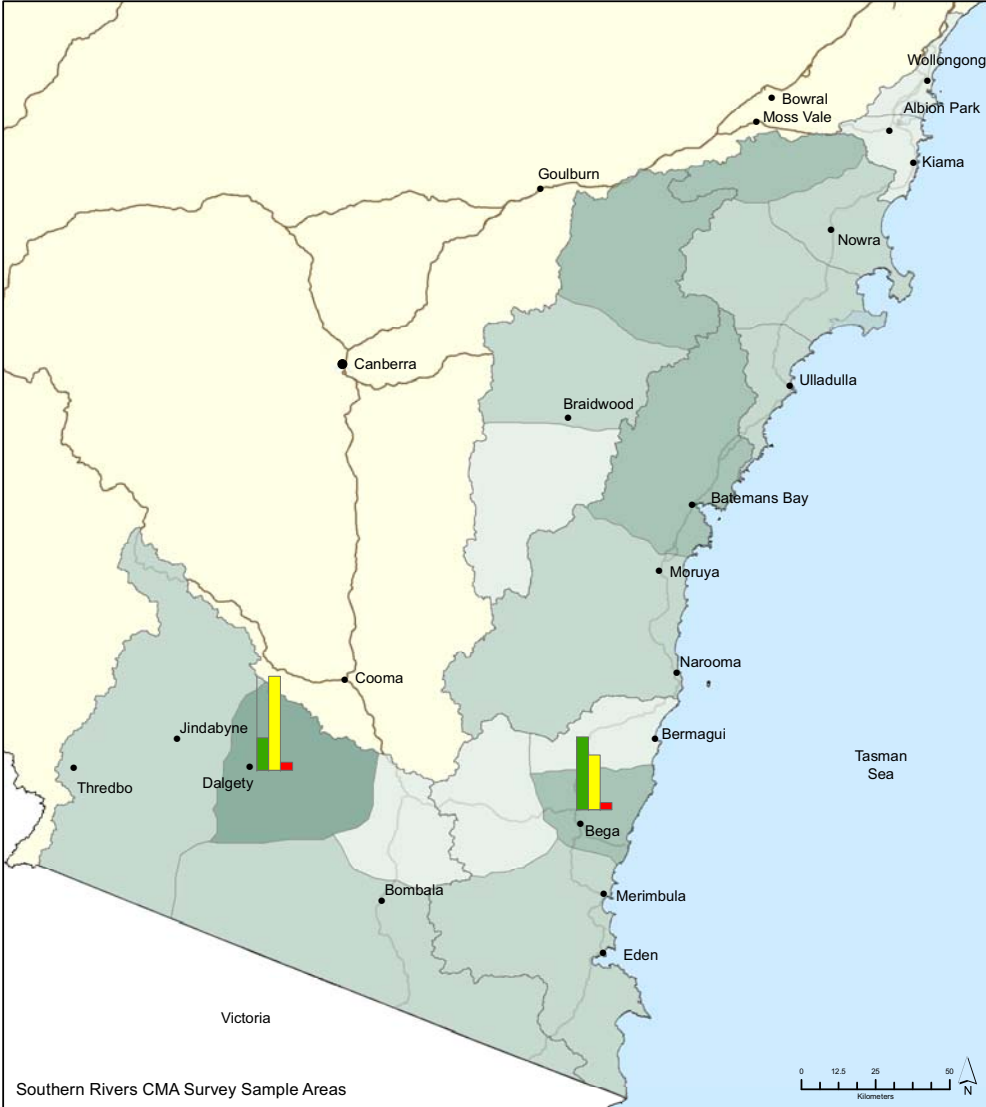
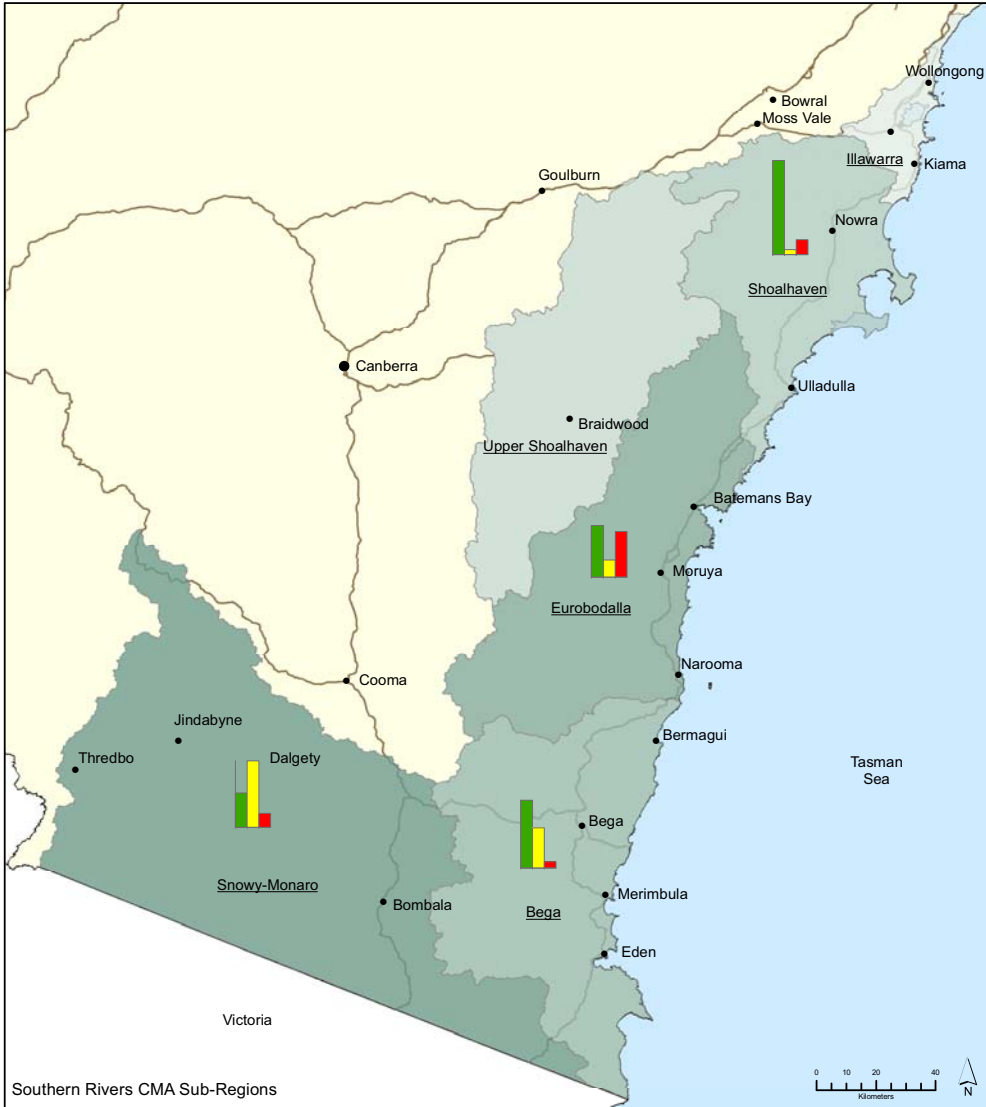
12. PERCENT UNDERTAKING ACTION TO ADDRESS WEEDS



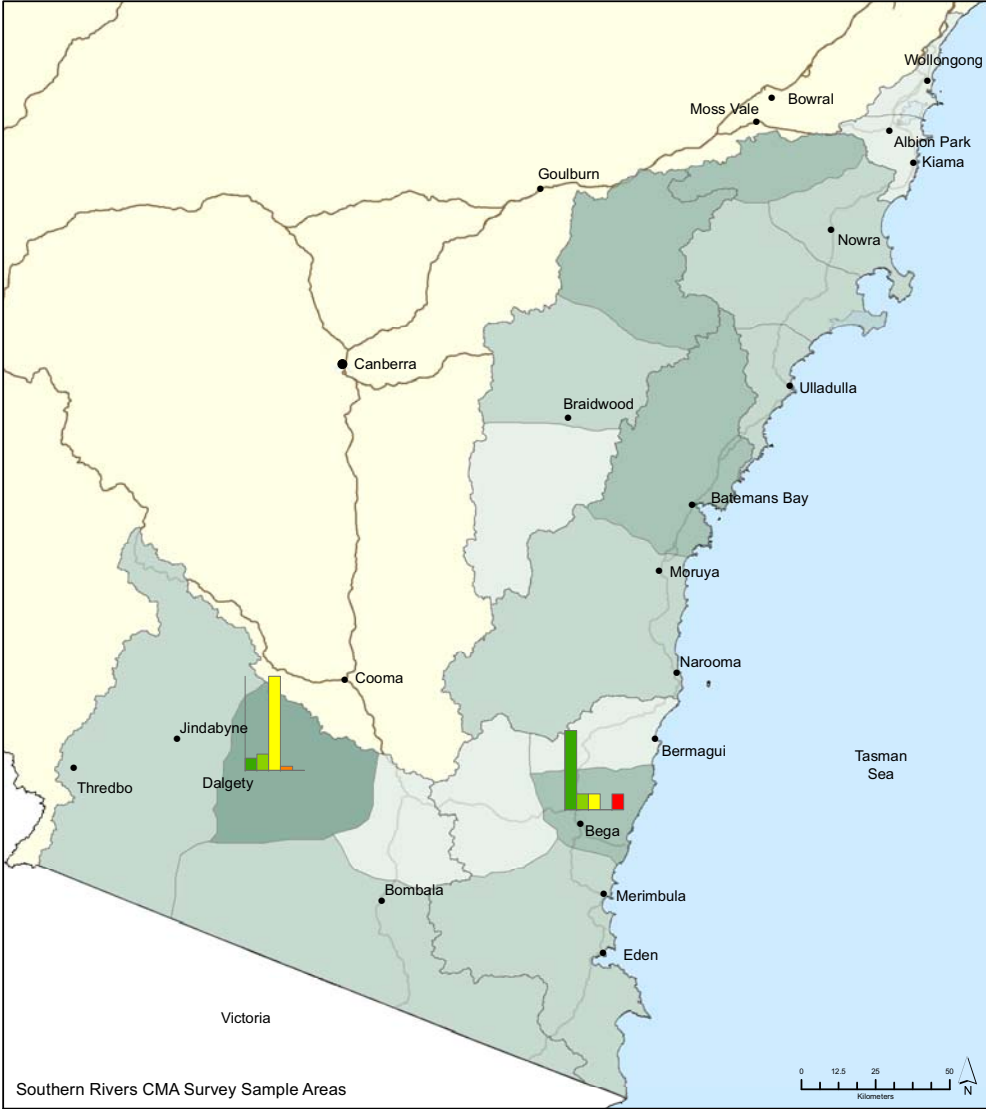
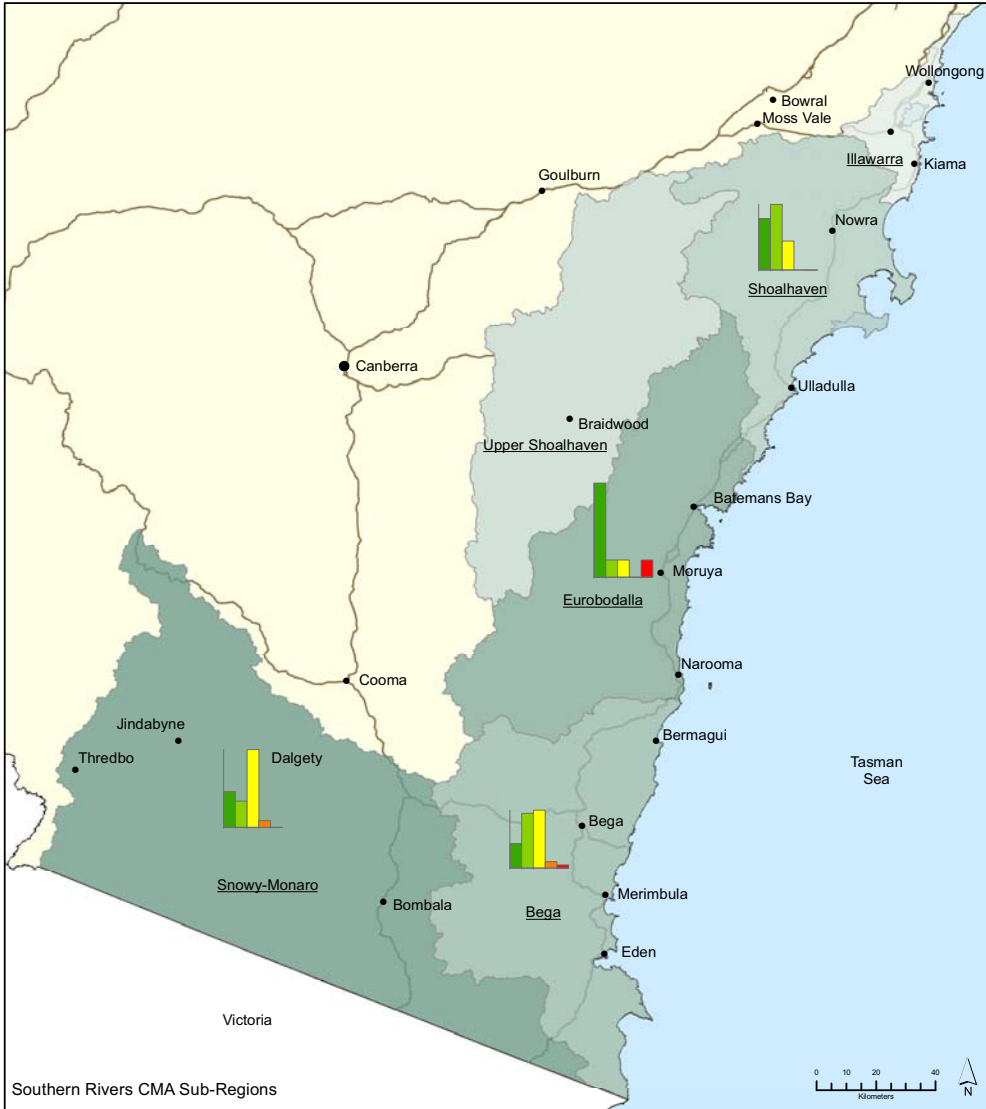
13. PERCENT REPORTING A DECLINE IN NATIVE ANIMALS



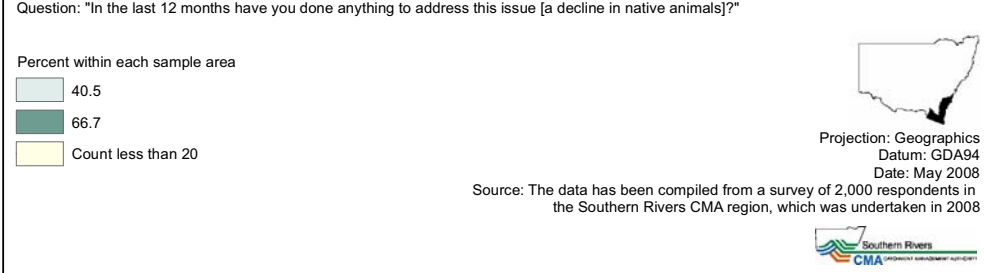
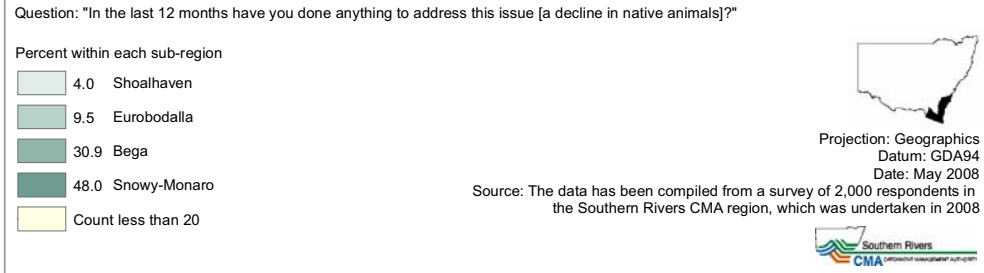
14. EXTENT OF THE DECLINE IN NATIVE ANIMALS



15. CAPACITY TO ADDRESS THE DECLINE IN NATIVE ANIMALS



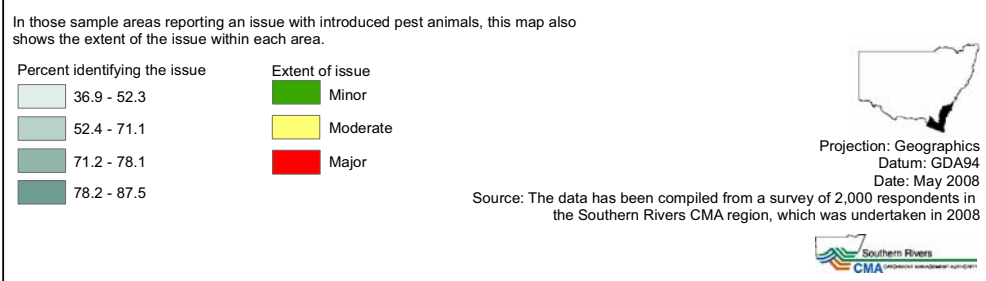
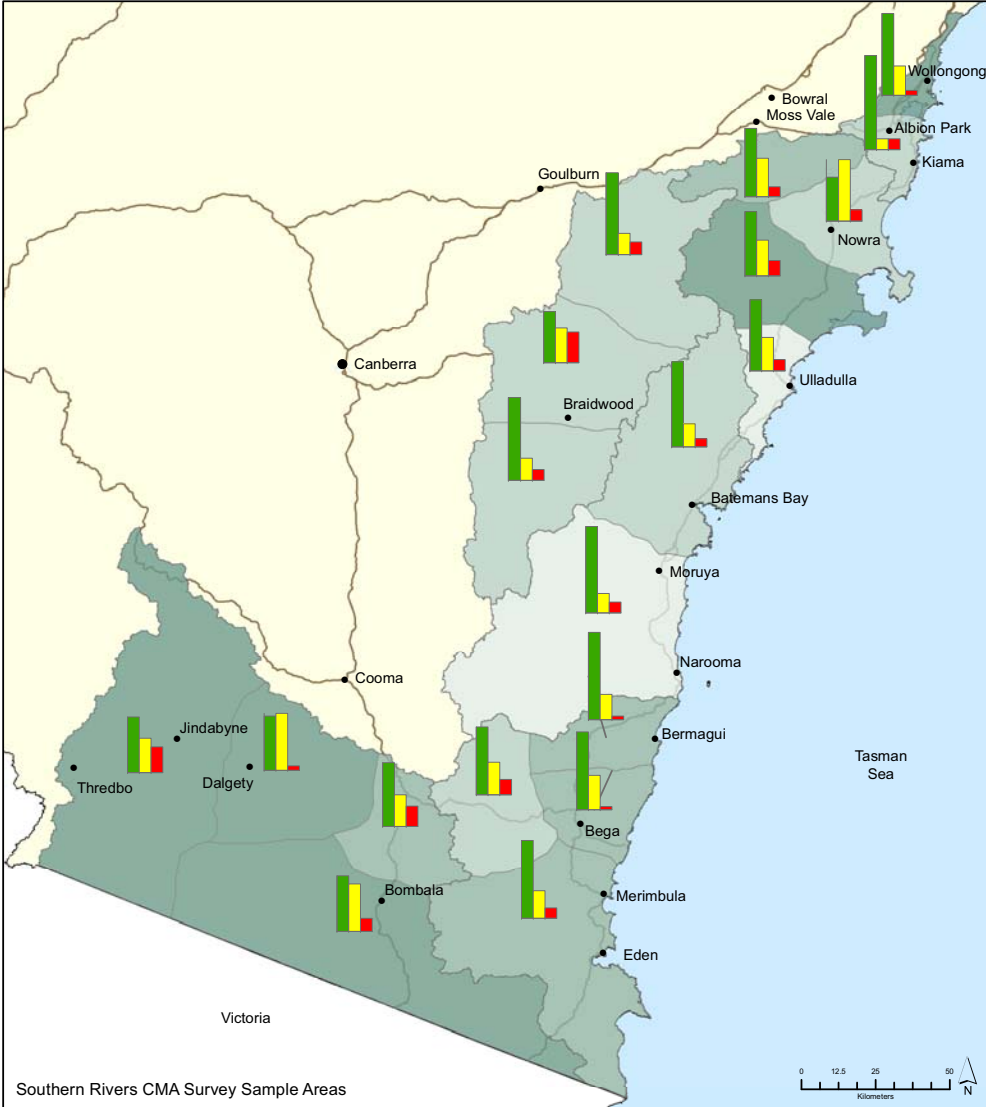
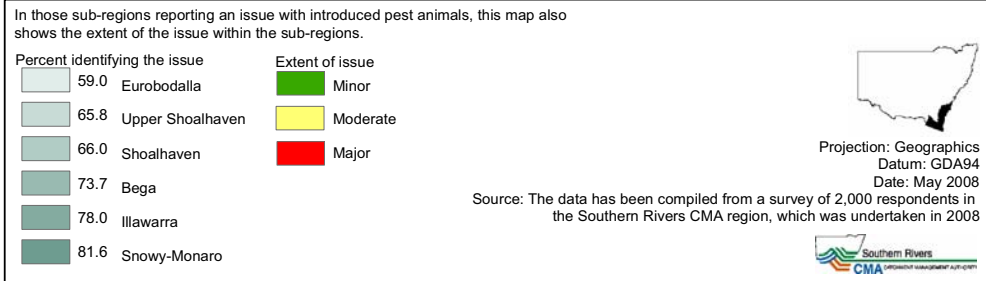
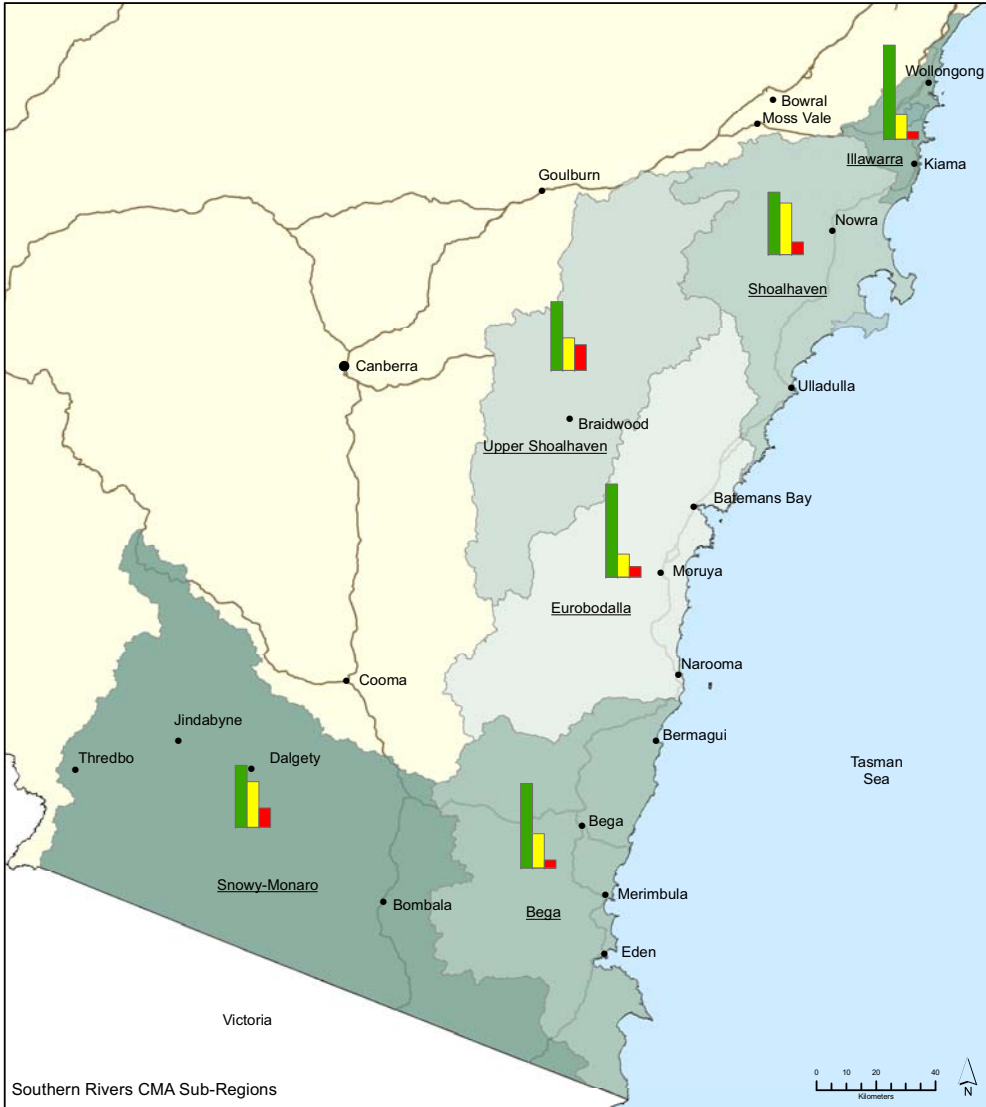
16. PERCENT UNDERTAKING ACTION TO ADDRESS THE DECLINE IN NATIVE ANIMALS



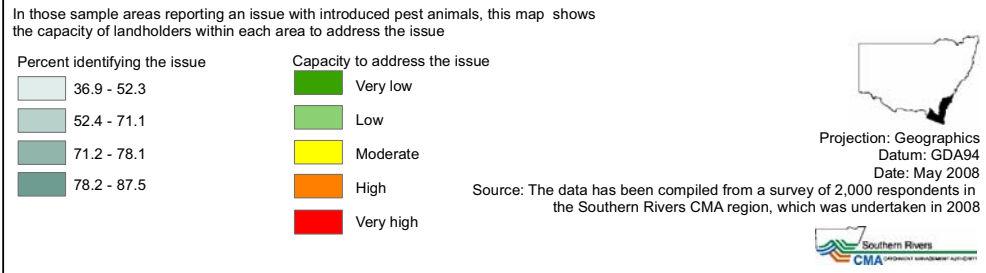
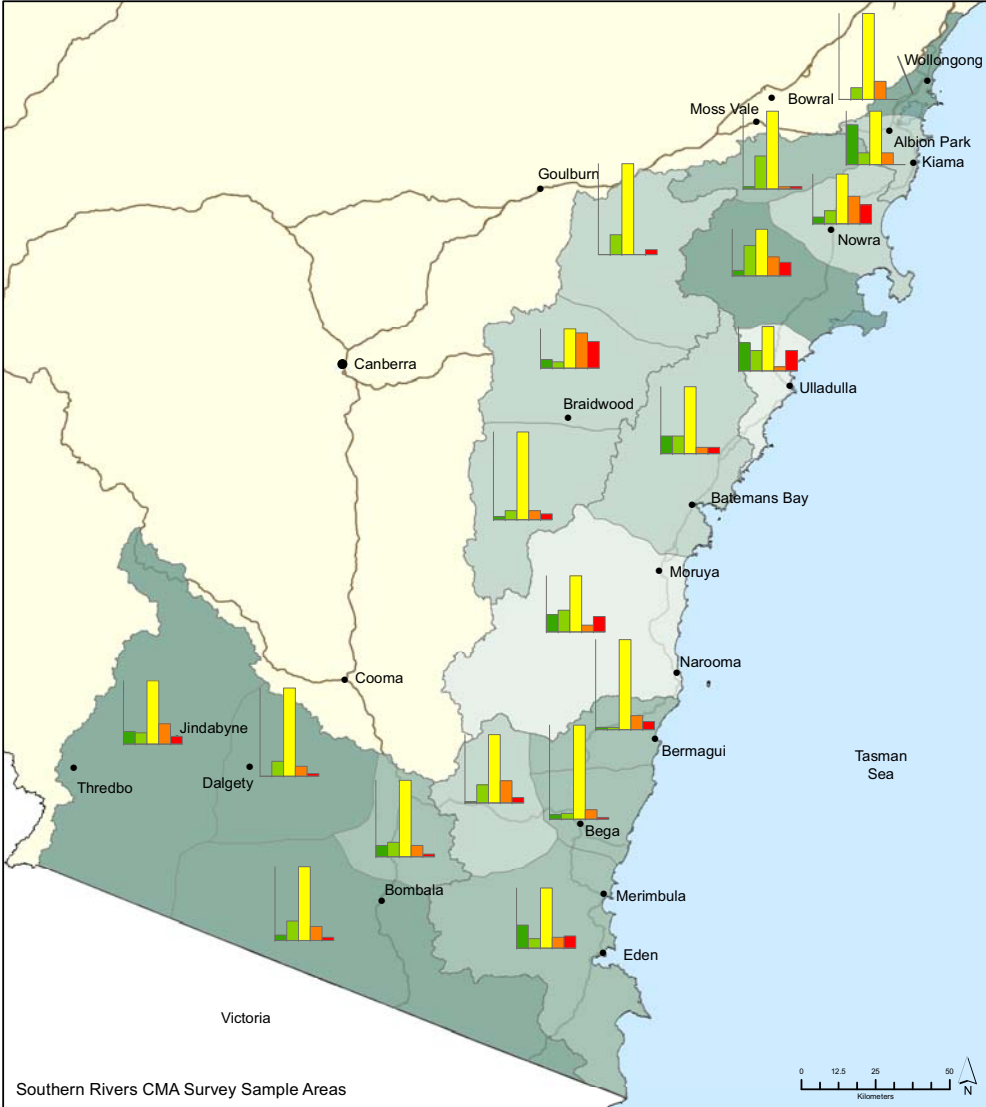
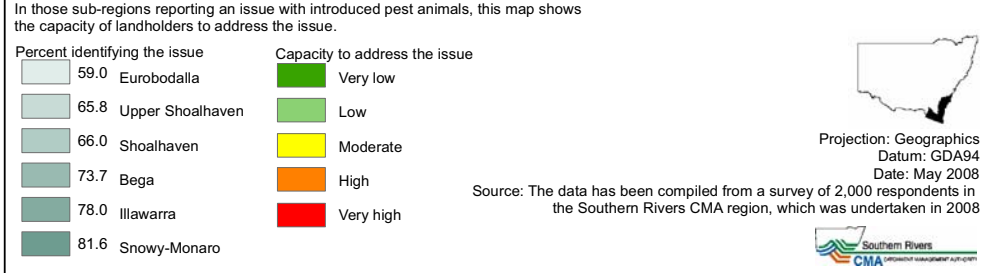
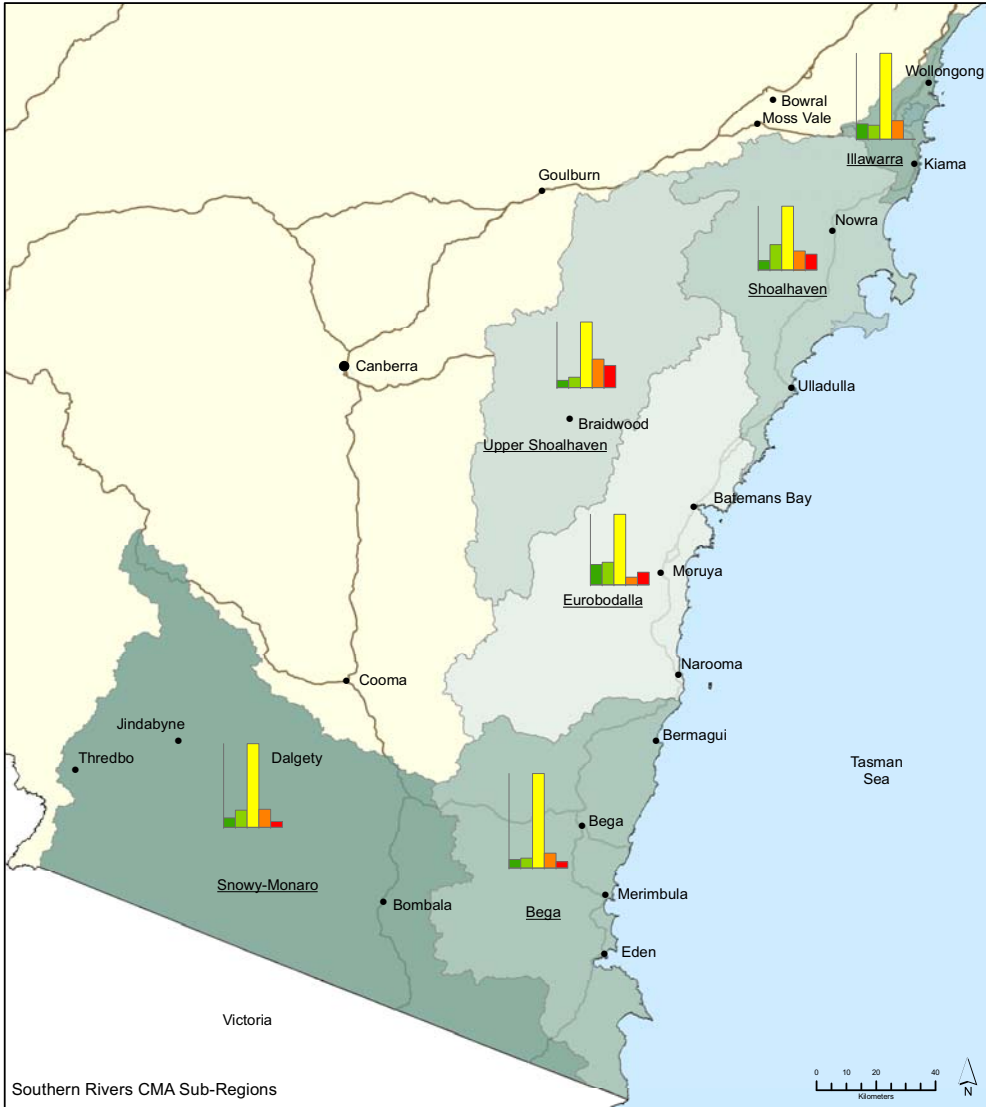
17. PERCENT REPORTING INTRODUCED PEST ANIMALS (inc. foxes, pigs and rabbits)



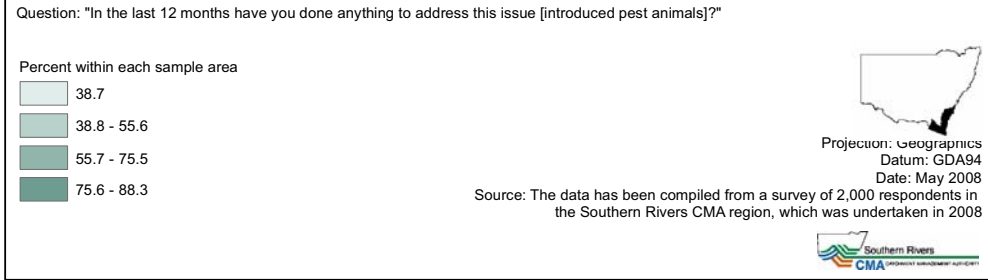
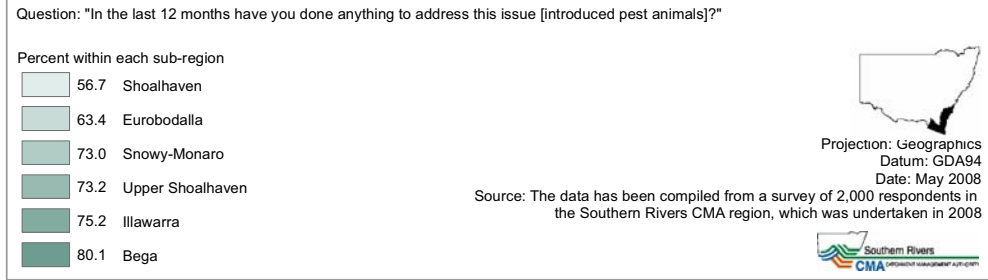
18. EXTENT OF ISSUE WITH INTRODUCED PEST ANIMALS



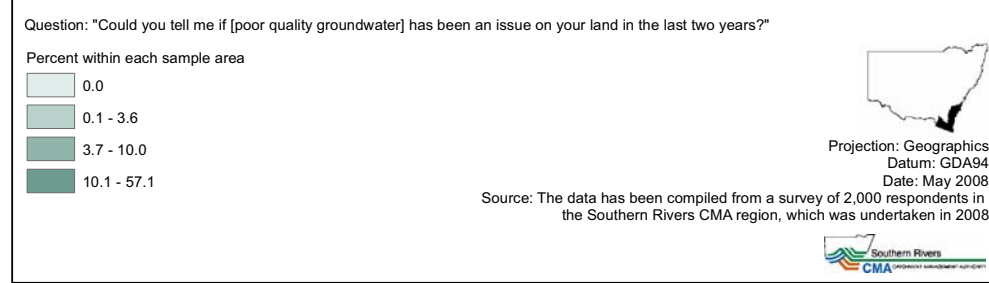
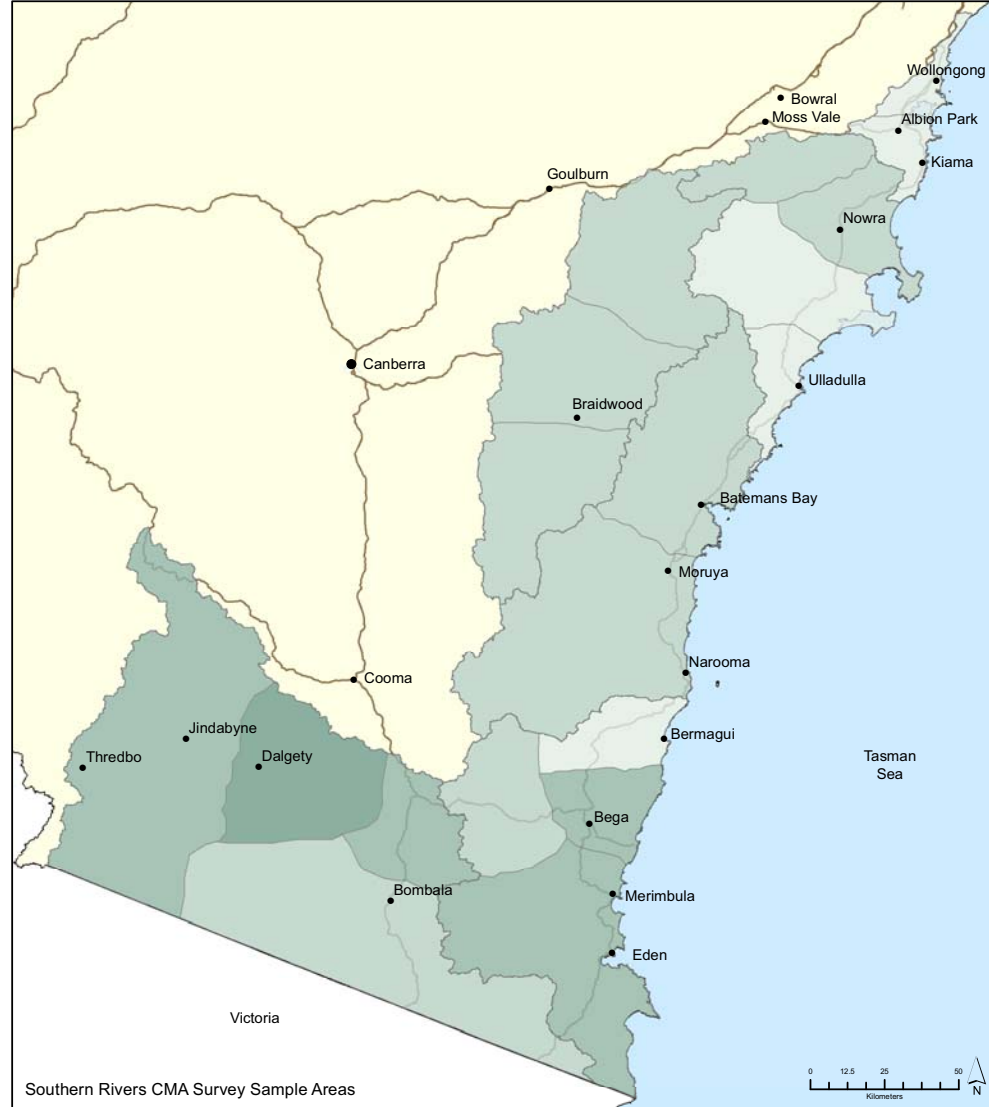
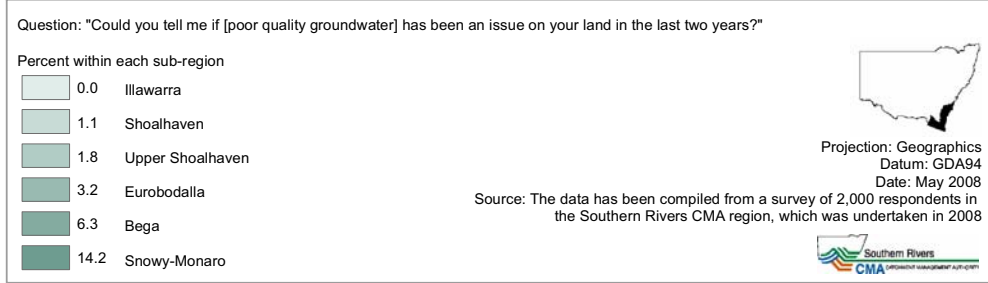
19. CAPACITY TO ADDRESS THE ISSUE OF INTRODUCED PEST ANIMALS



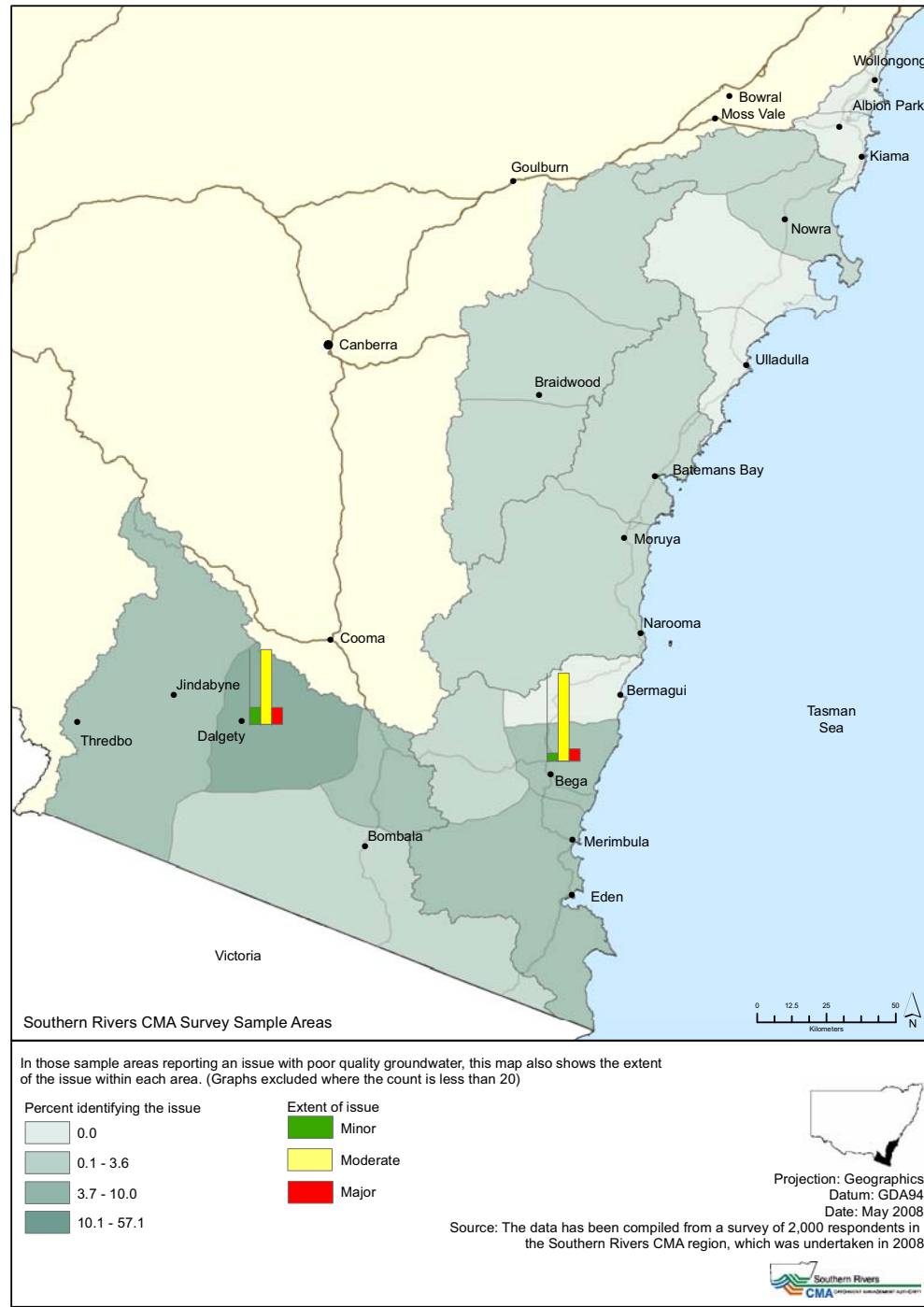
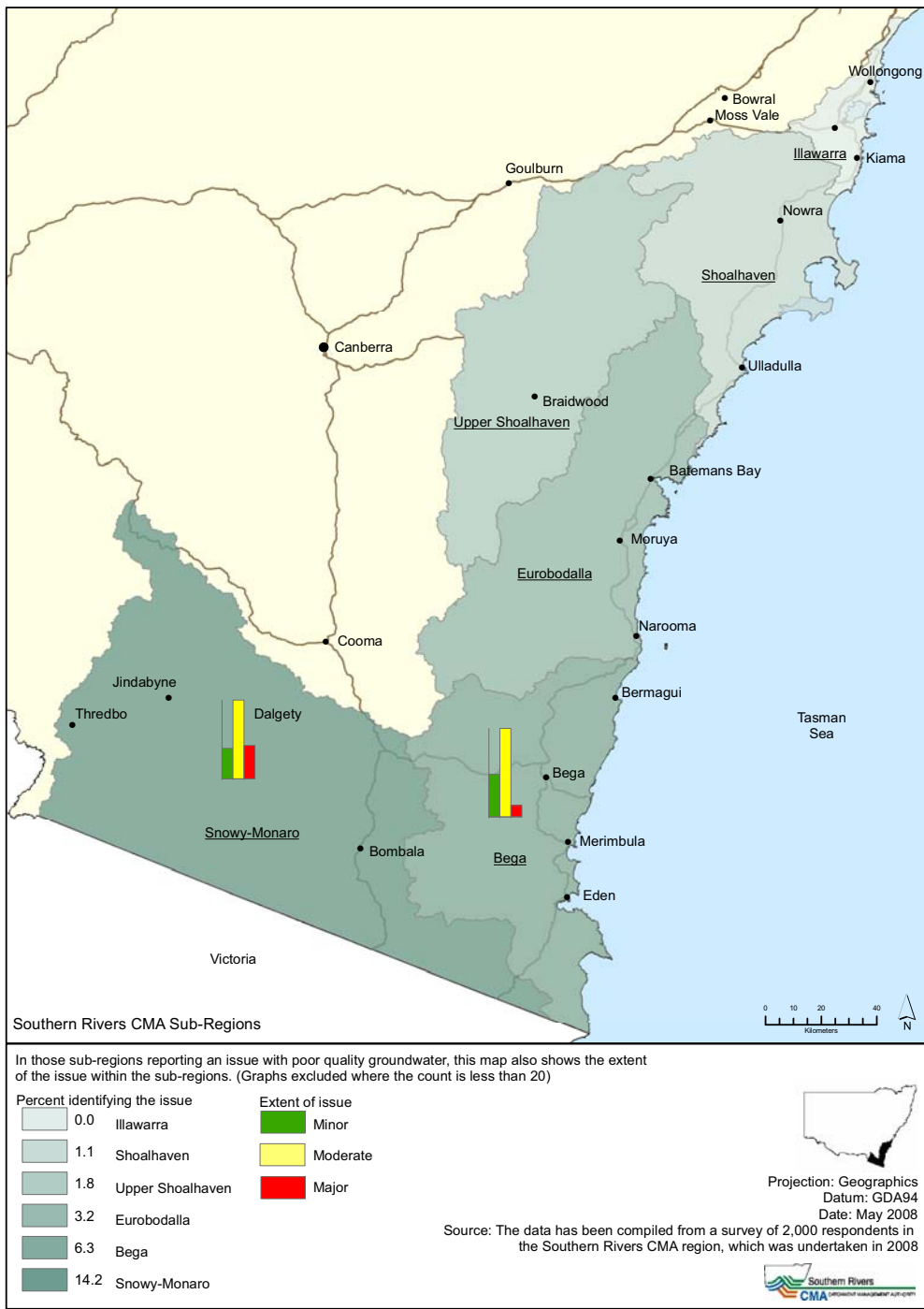
20. INTRODUCED PEST ANIMALS: ACTIVITIES TO ADDRESS PEST ANIMALS



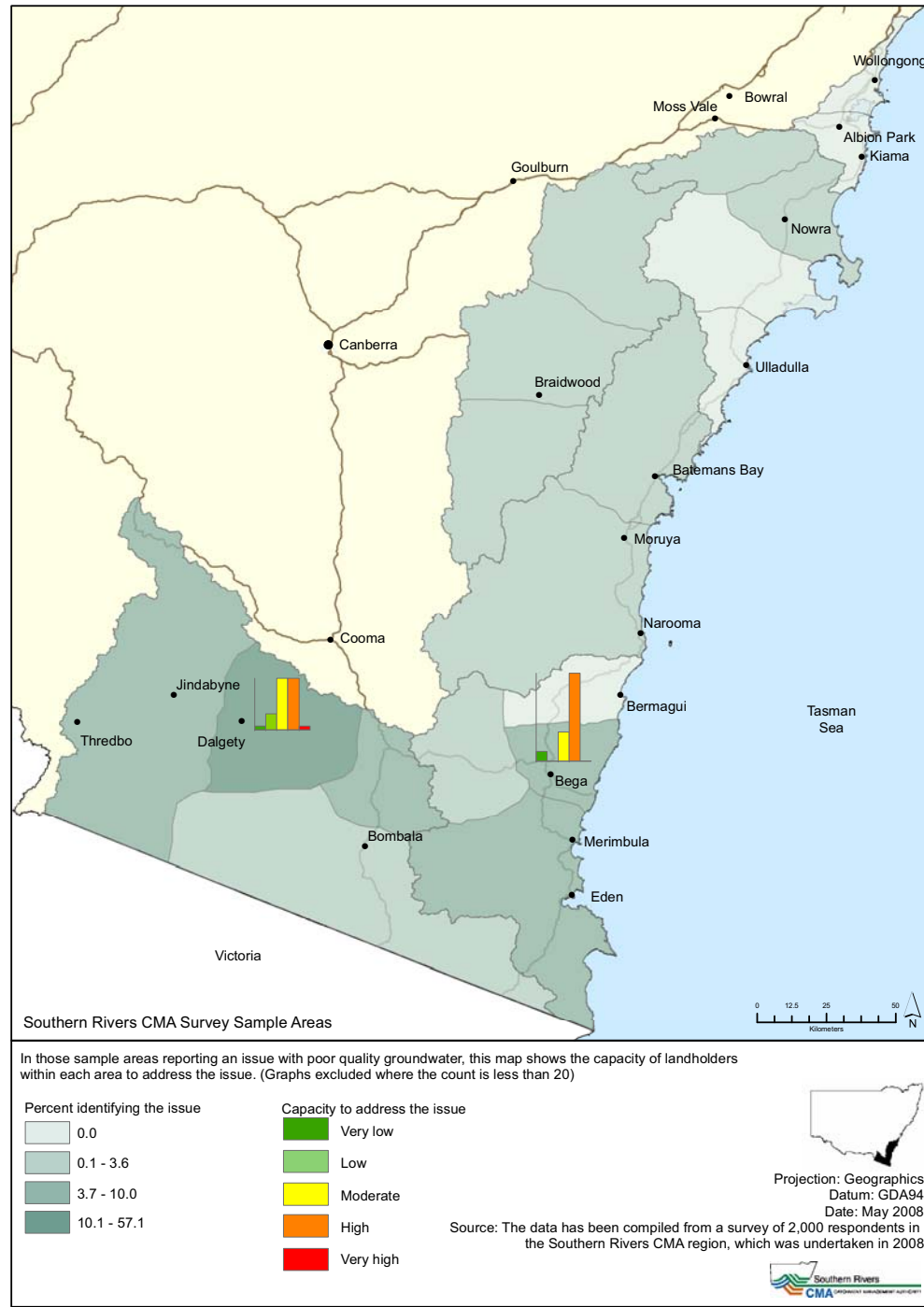
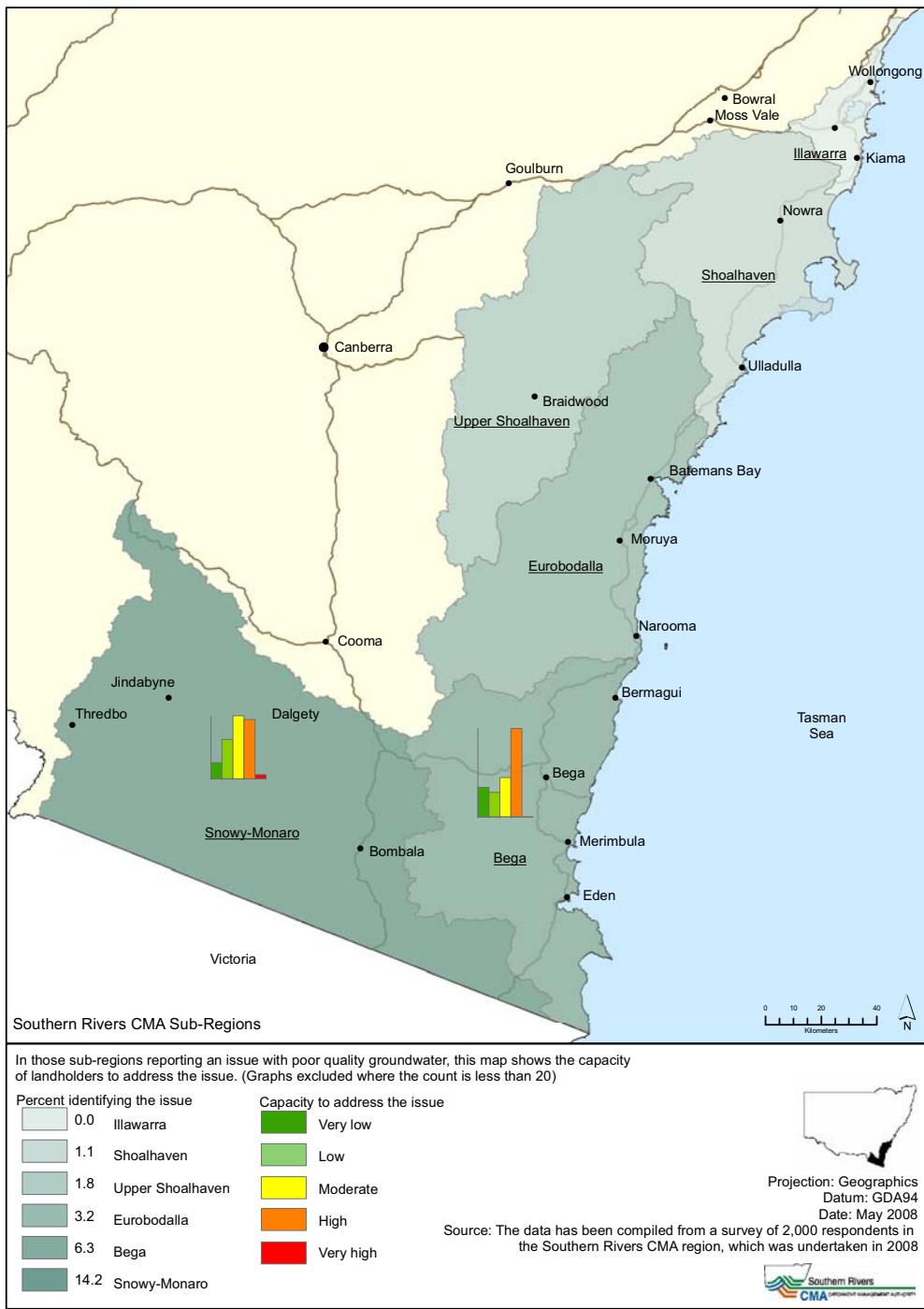
21. PERCENT REPORTING POOR QUALITY GROUNDWATER



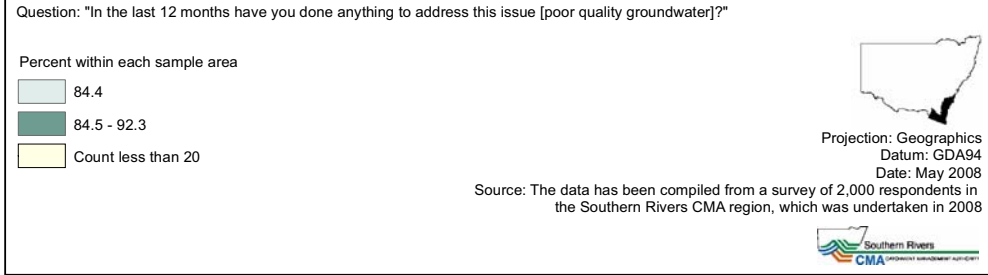
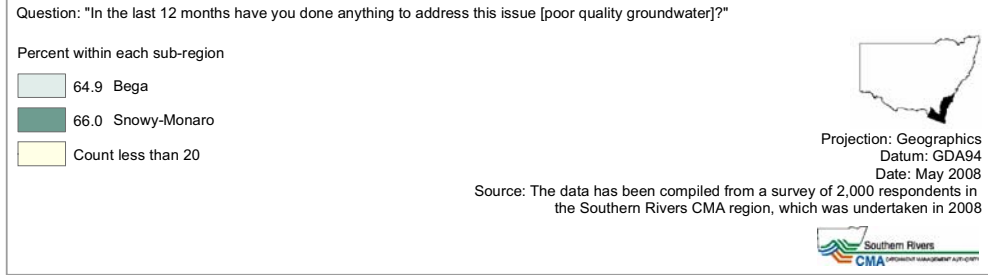
22. EXTENT OF THE ISSUE WITH POOR QUALITY GROUNDWATER



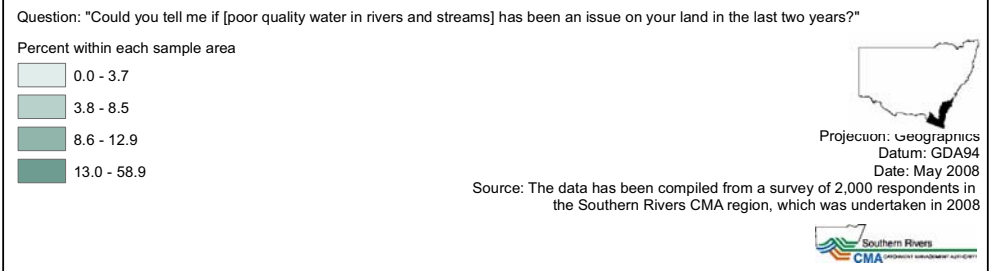
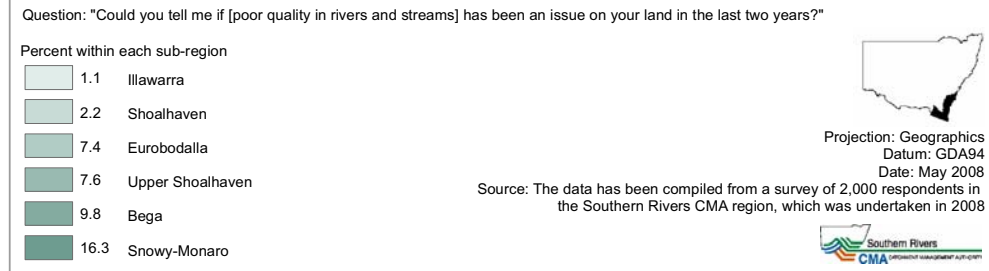
23. CAPACITY TO ADDRESS POOR QUALITY GROUNDWATER



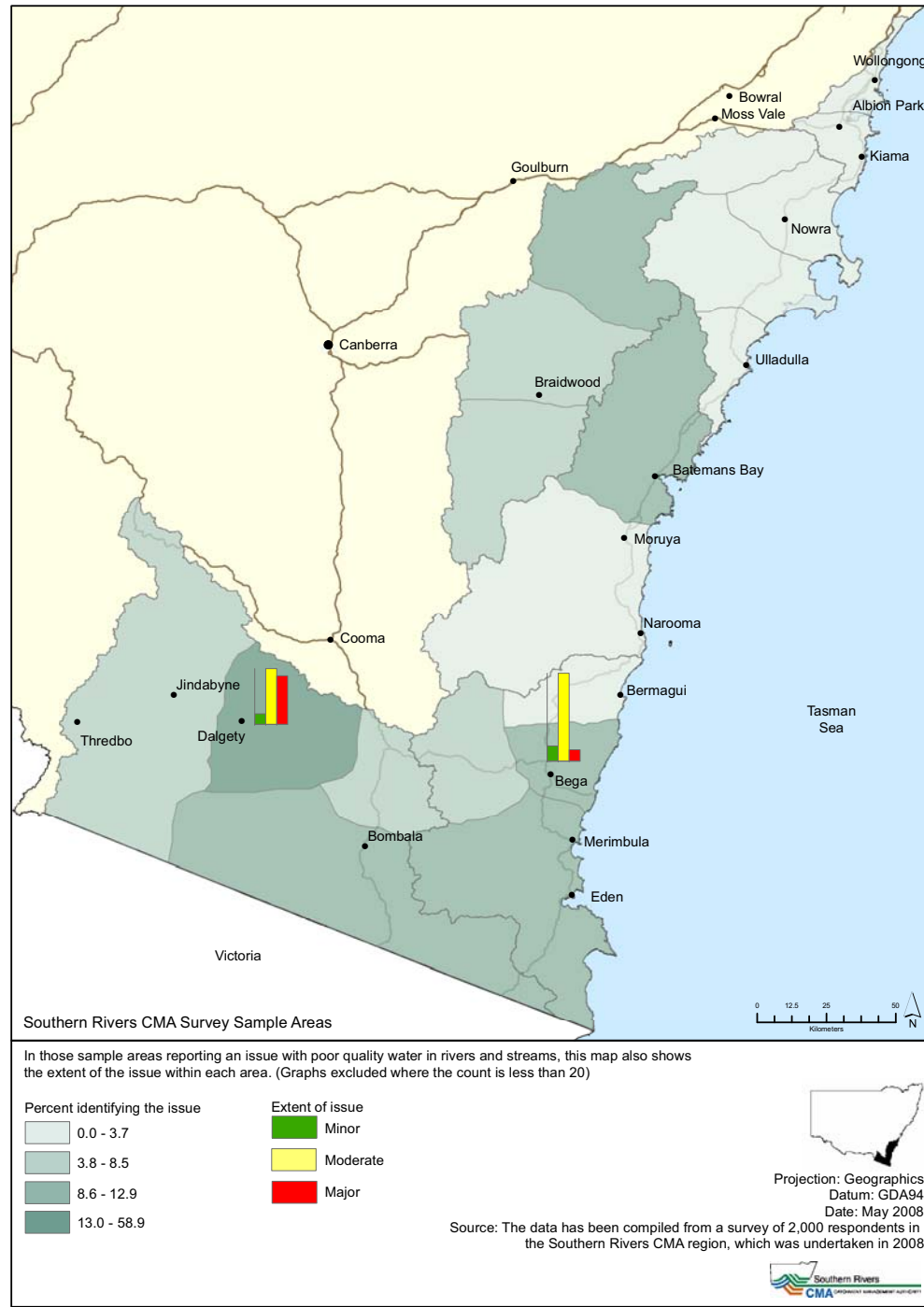
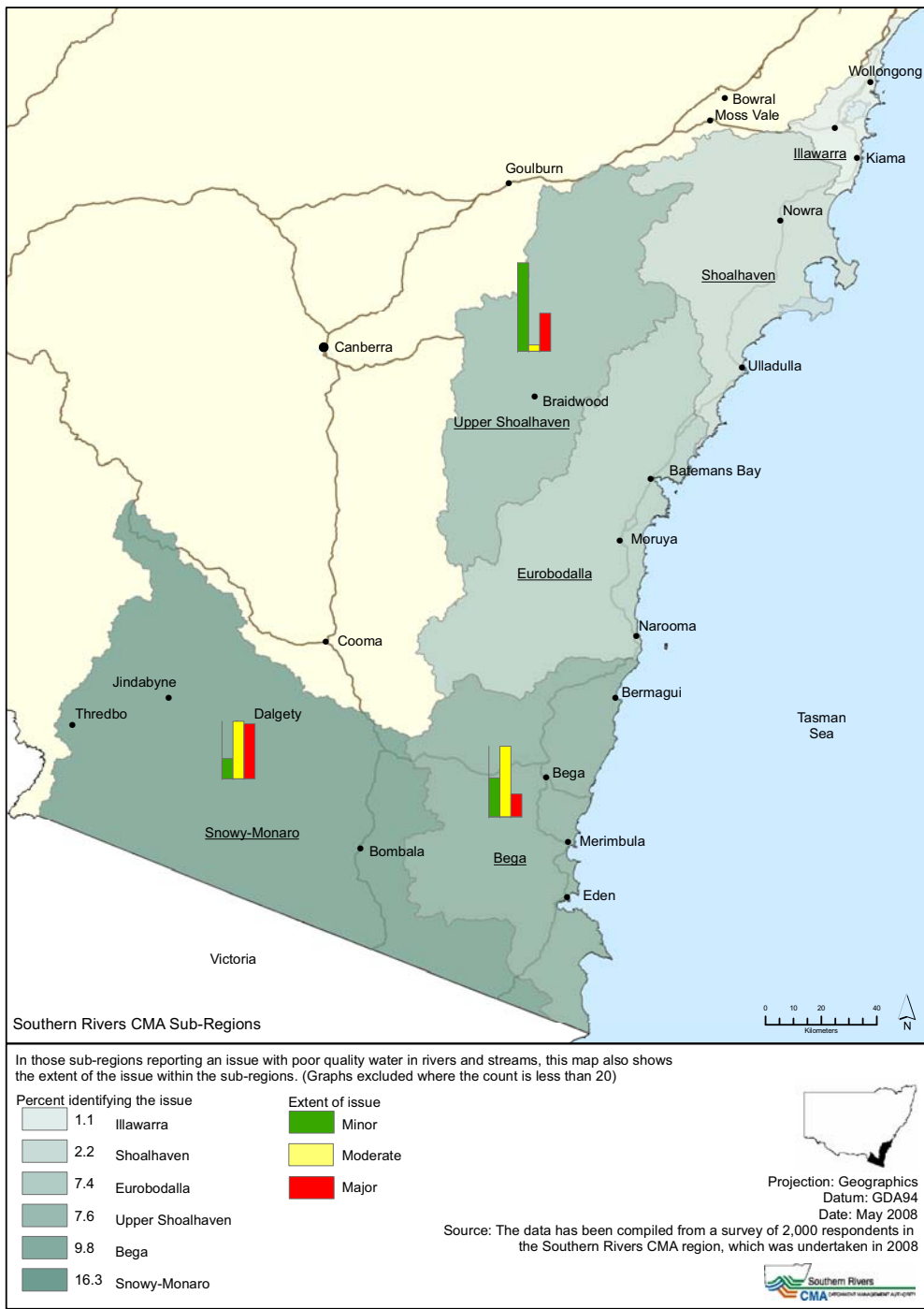
24. PERCENT UNDERTAKING ACTION TO ADDRESS POOR QUALITY GROUNDWATER



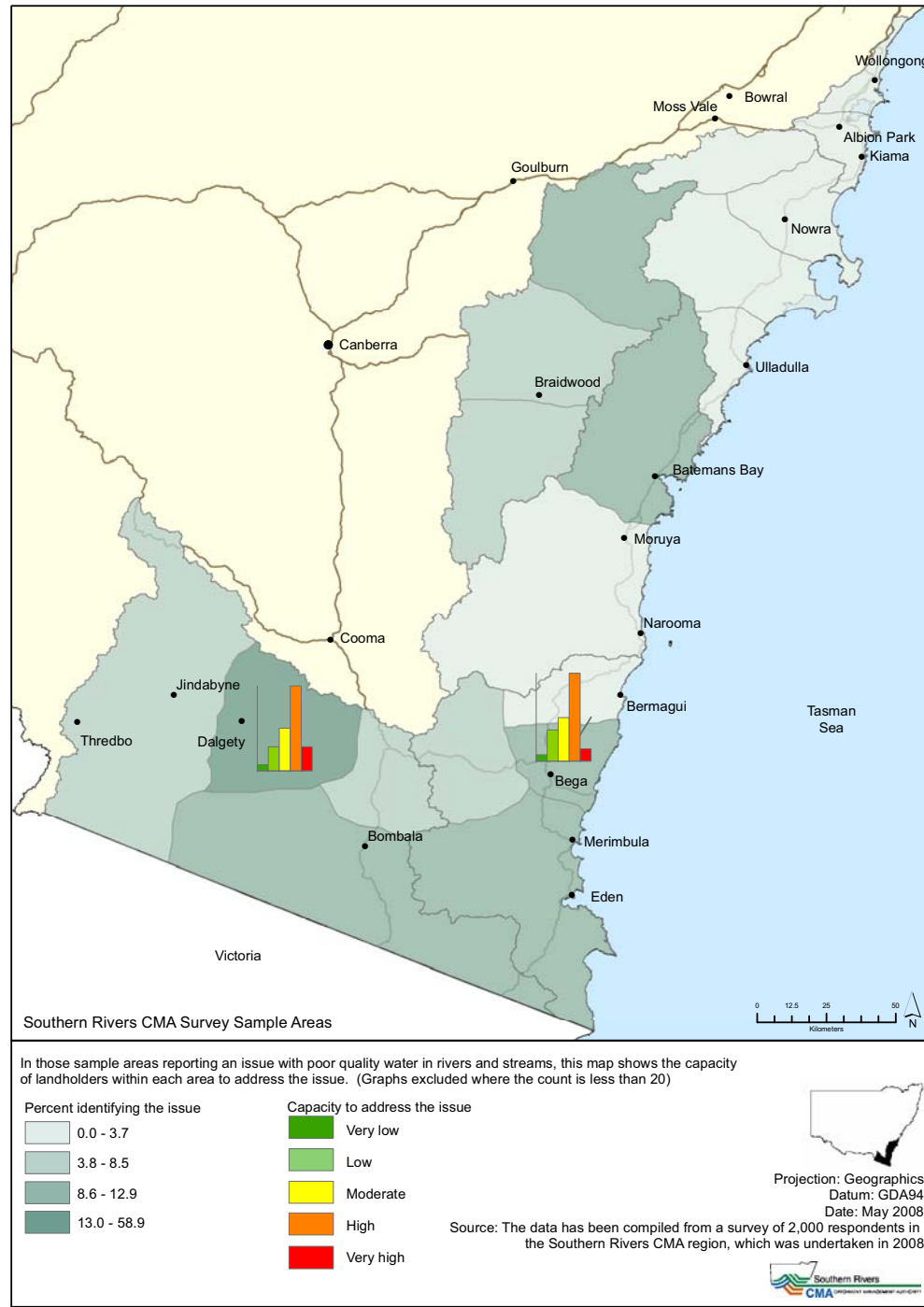
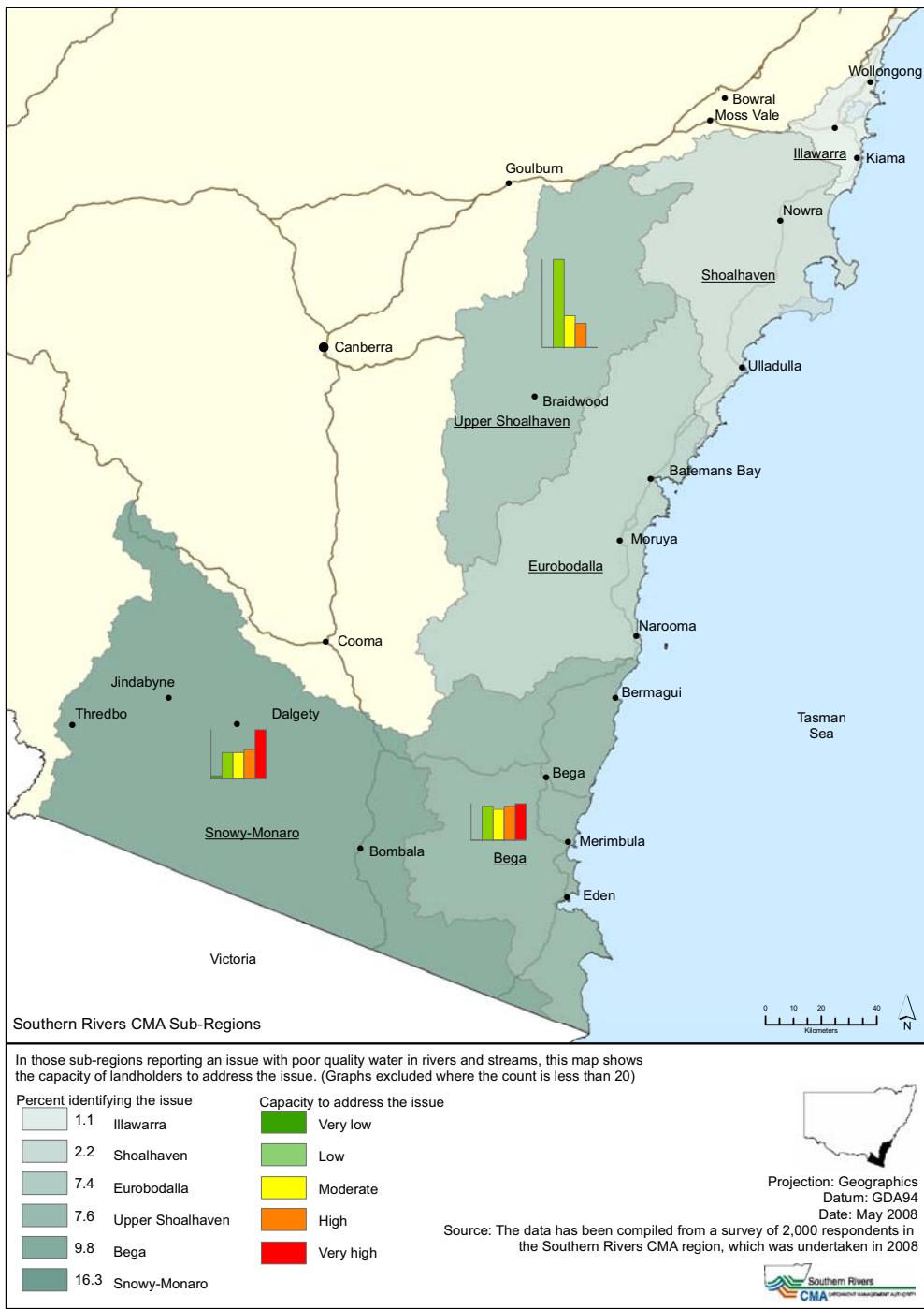
25. PERCENT REPORTING POOR QUALITY WATER IN RIVERS AND STREAMS



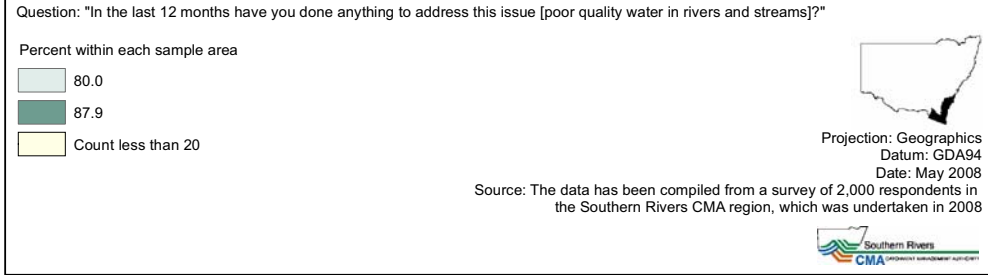
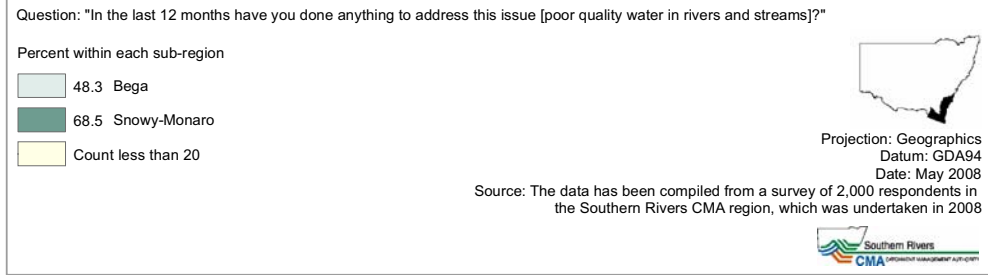
26. EXTENT OF ISSUE WITH POOR QUALITY WATER IN RIVERS AND STREAMS



27. CAPACITY TO ADDRESS POOR QUALITY WATER IN RIVERS AND STREAMS



28. PERCENT UNDERTAKING ACTION TO ADDRESS POOR QUALITY WATER IN RIVERS AND STREAMS



29. PERCENT REPORTING POOR SOIL CONDITION (inc. nutrient deficiency, acidity and compaction)



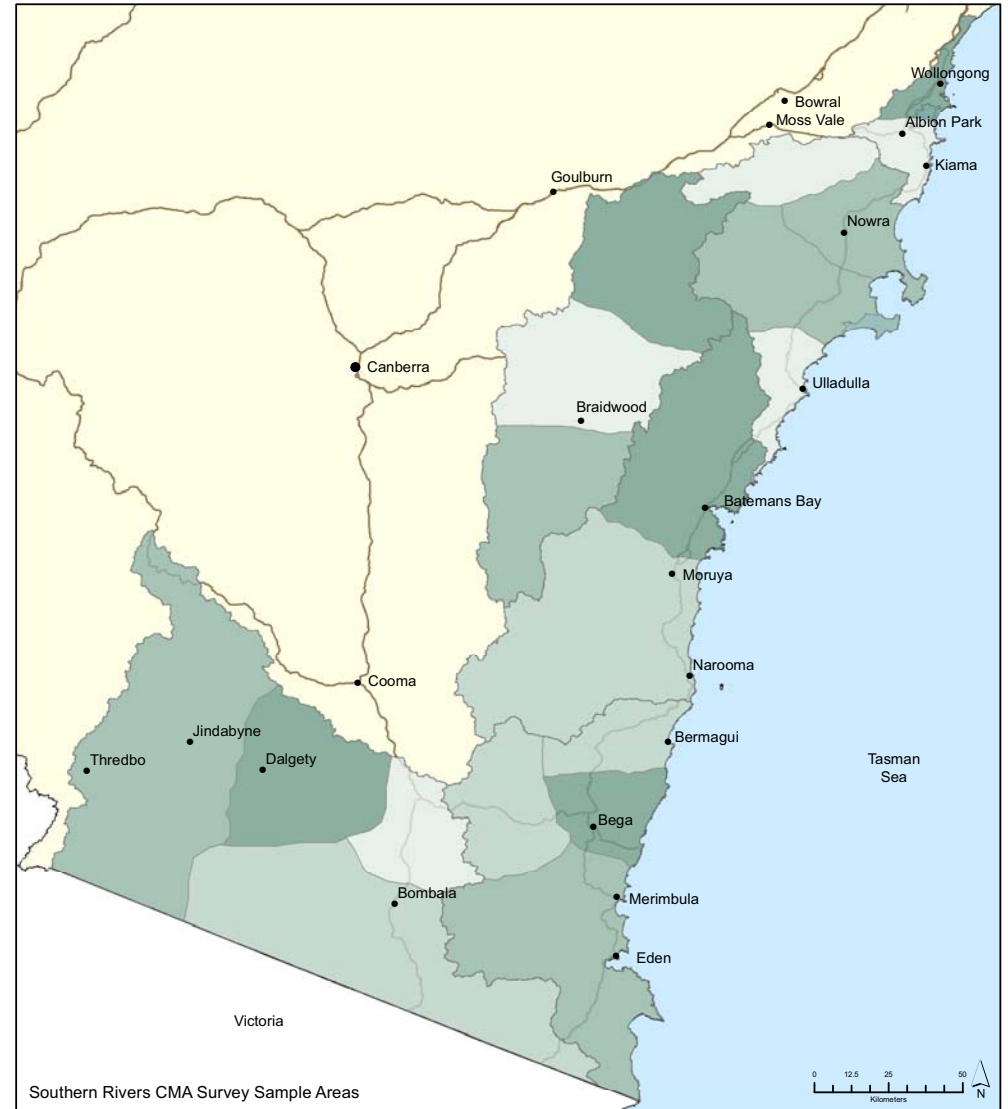
Question: "Could you tell me if [poor soil condition] has been an issue on your land in the last two years?"

Percent within each sub-region

28.1	Upper Shoalhaven
28.8	Shoalhaven
31.4	Illawarra
37.8	Snowy-Monaro
37.9	Eurobodalla
41.2	Bega

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



Question: "Could you tell me if [poor soil condition] has been an issue on your land in the last two years?"

Percent within each sample area

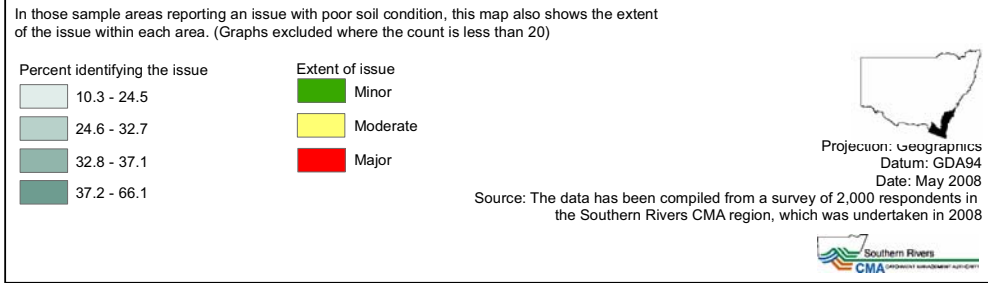
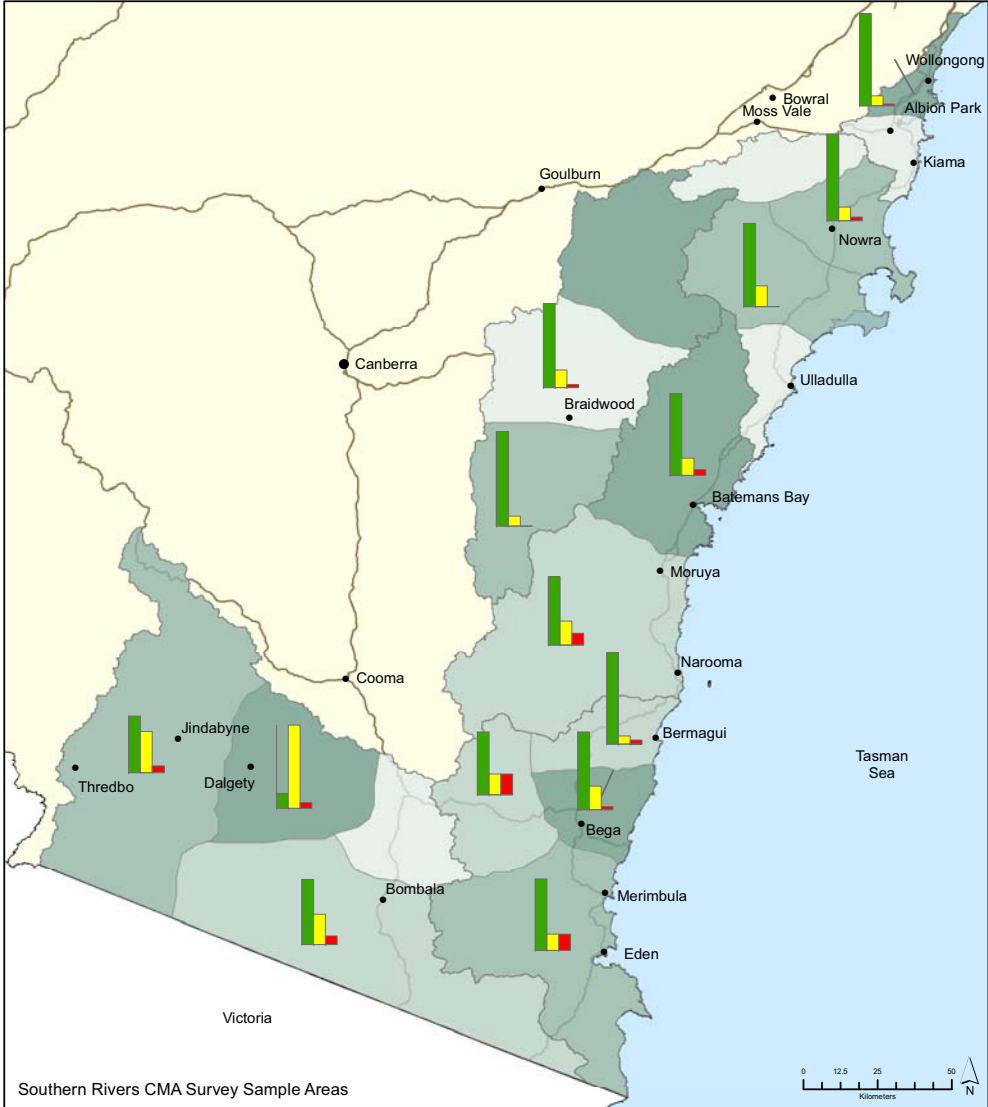
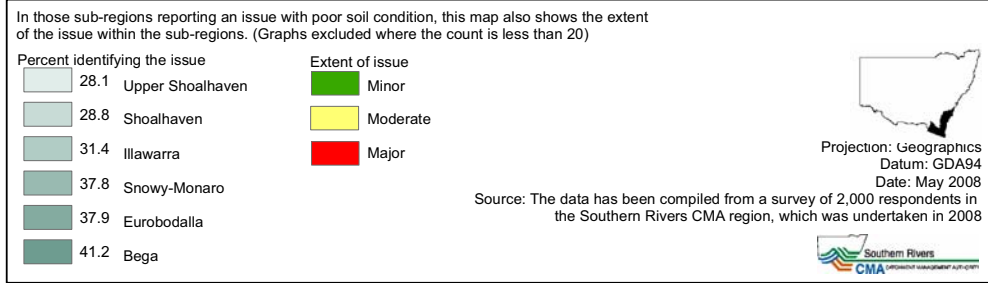
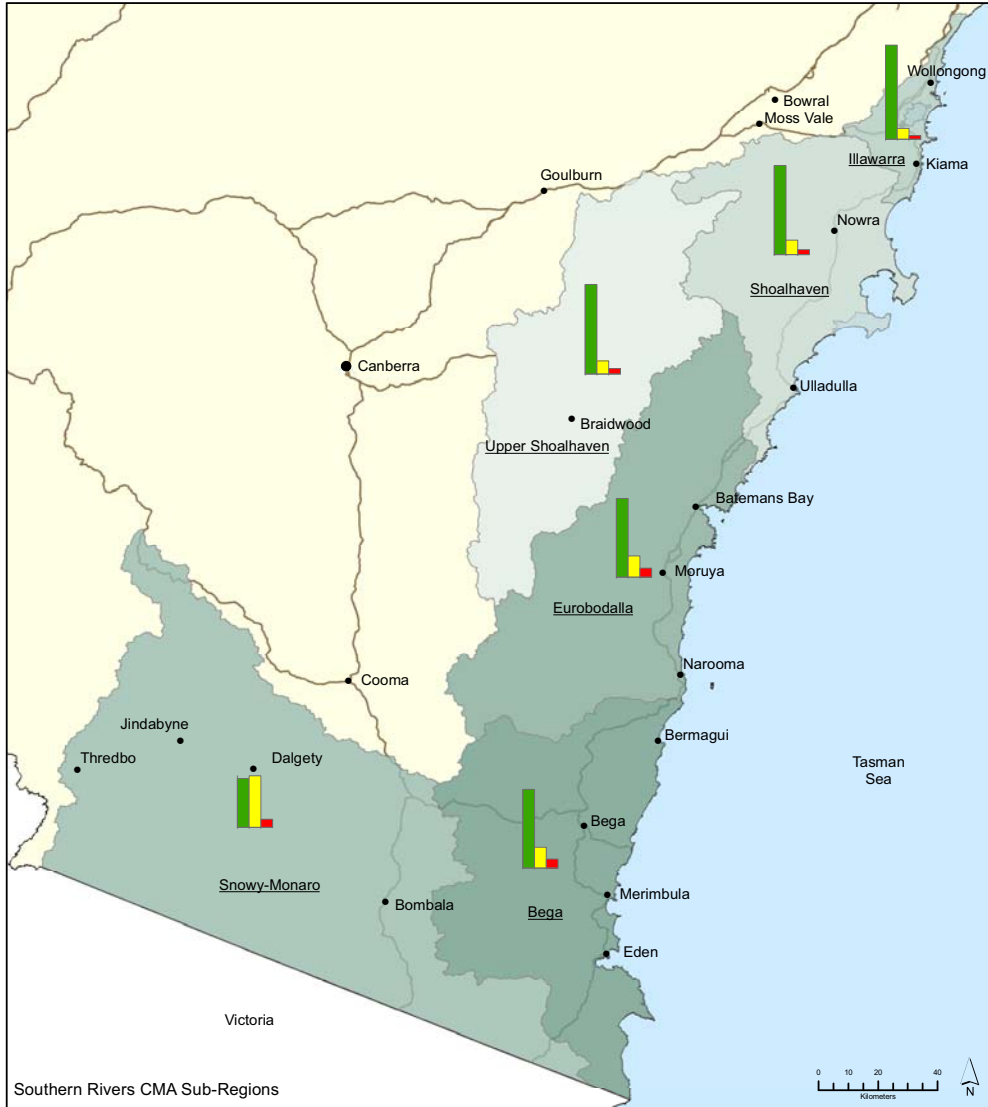
10.3 - 24.5
24.6 - 32.7
32.8 - 37.1
37.2 - 66.1

Projection: Geographics
Datum: GDA94
Date: May 2008

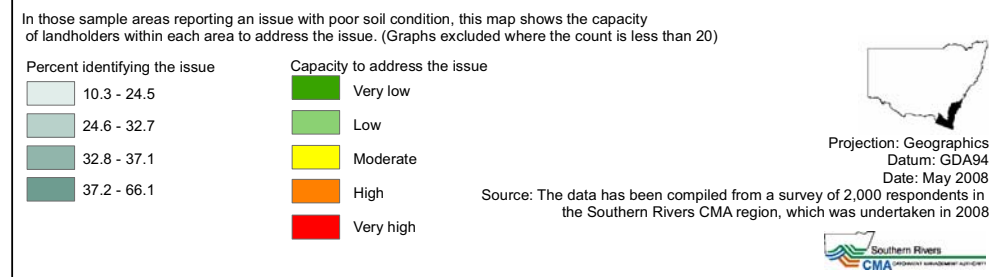
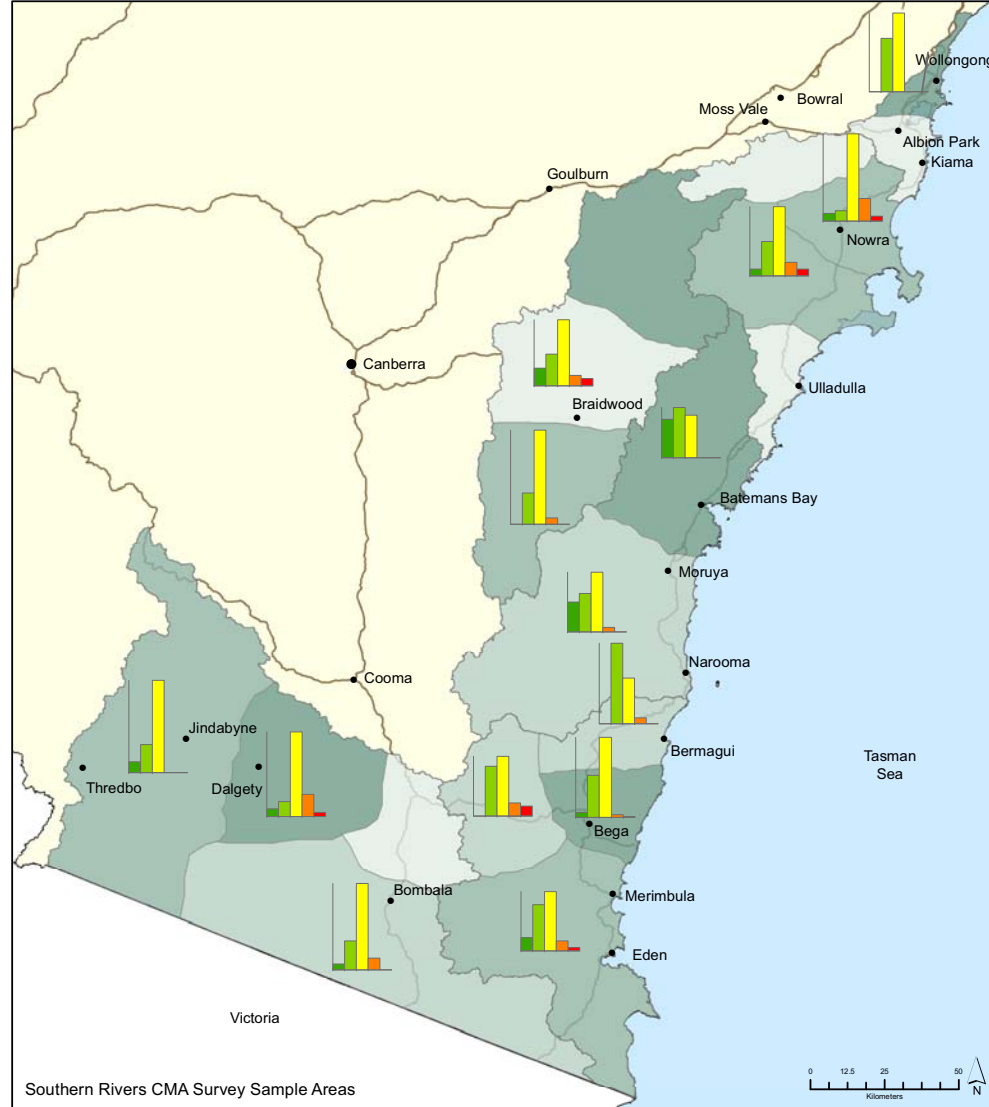
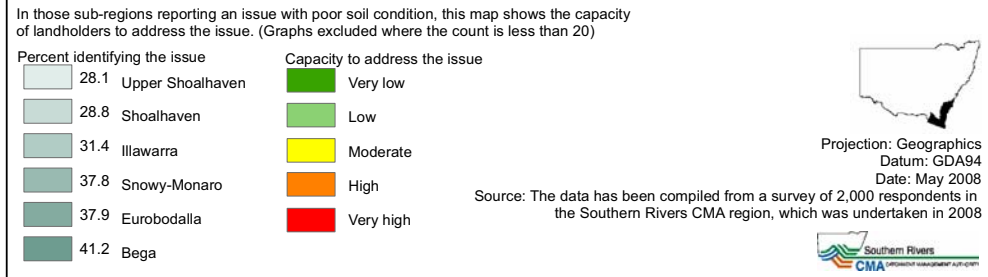
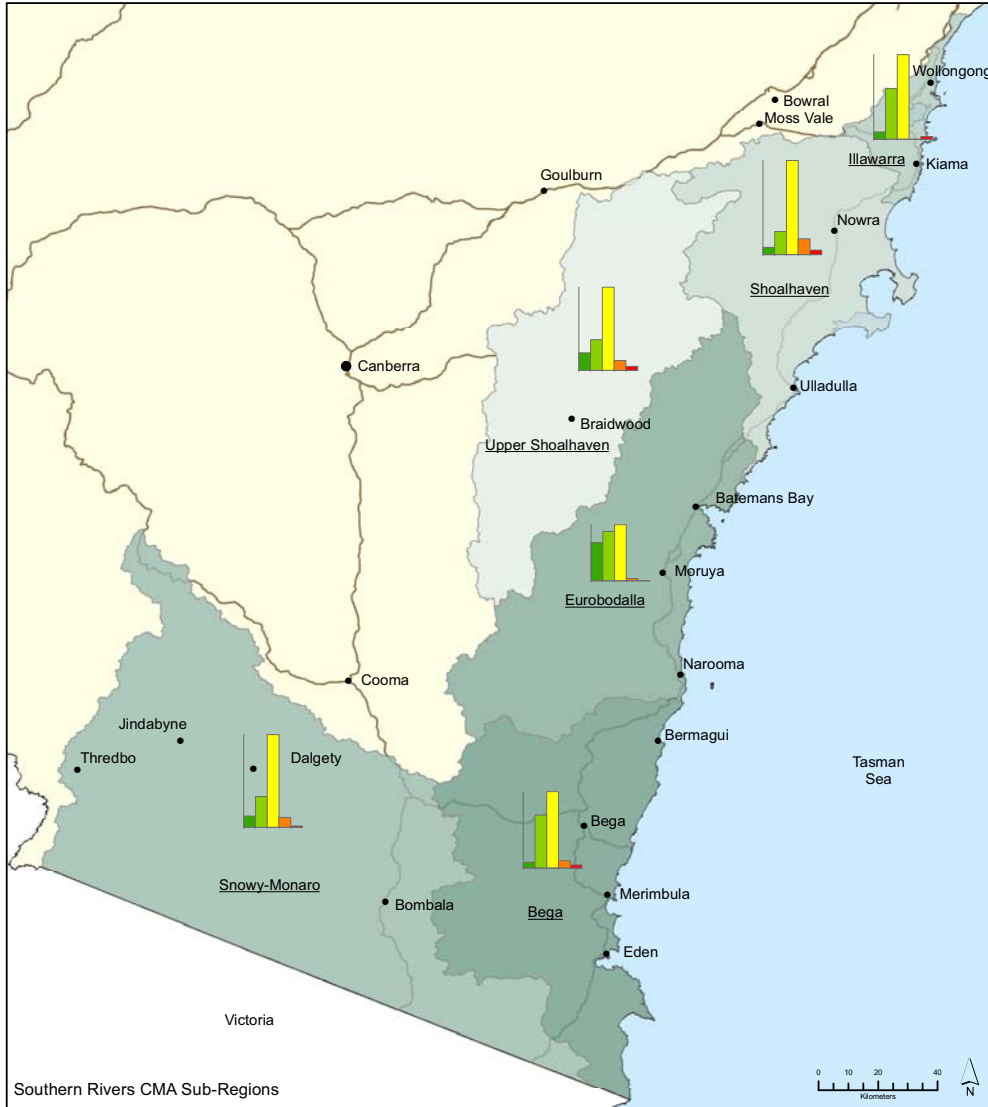
Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



30. EXTENT OF ISSUE WITH POOR SOIL CONDITION



31. CAPACITY TO ADDRESS POOR SOIL CONDITION



32. PERCENT UNDERTAKING ACTION TO ADDRESS POOR SOIL CONDITION



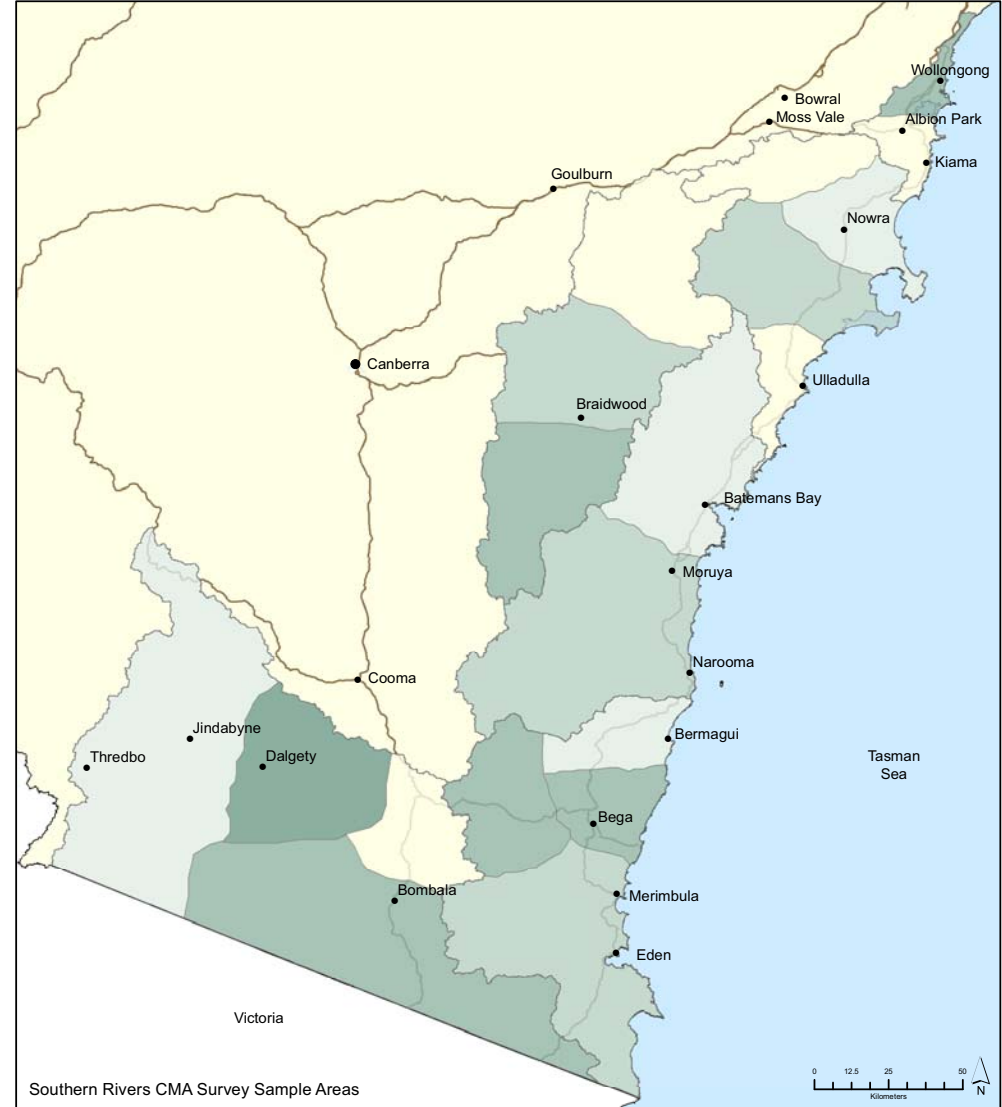
Question: "In the last 12 months have you done anything to address this issue [poor soil condition]?"

Percent within each sub-region

- 43.1 Eurobodalla
- 46.2 Upper Shoalhaven
- 47.7 Shoalhaven
- 51.7 Illawarra
- 53.6 Snowy-Monaro
- 54.9 Bega

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



Question: "In the last 12 months have you done anything to address this issue [poor soil condition]?"

Percent within each sample area

- 24.0 - 37.8
- 37.9 - 52.2
- 52.3 - 67.5
- 67.6 - 83.8
- Count less than 20

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



33. PERCENT REPORTING REDUCED NATIVE VEGETATION COVER (inc. ground cover)



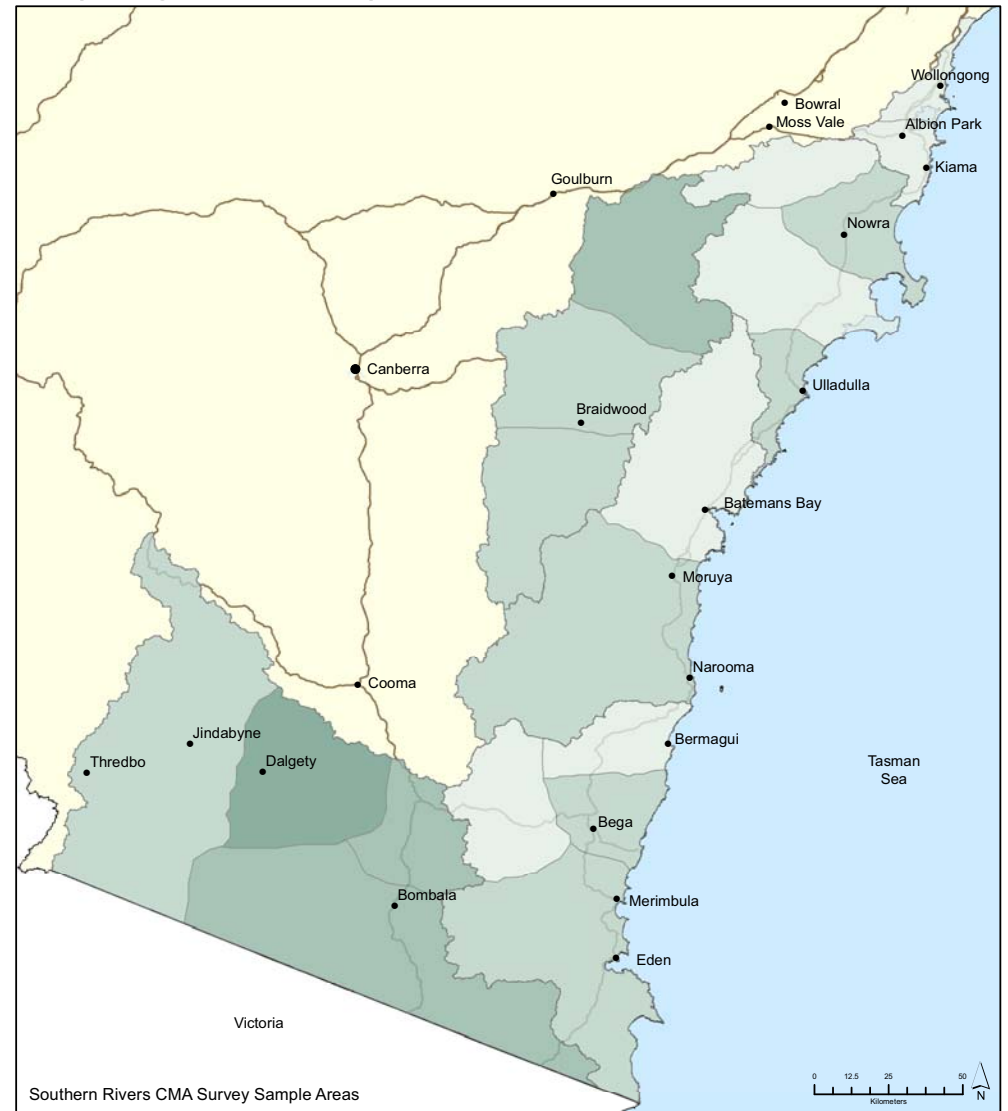
Question: "Could you tell me if [reduced native vegetation cover, including ground cover] has been an issue on your land in the last two years?"

Percent within each sub-region

0.0	Illawarra
4.6	Shoalhaven
5.3	Eurobodalla
6.5	Upper Shoalhaven
7.1	Bega
25.1	Snowy-Monaro

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



Question: "Could you tell me if [reduced native vegetation cover, including ground cover] has been an issue on your land in the last two years?"

Percent within each sample area

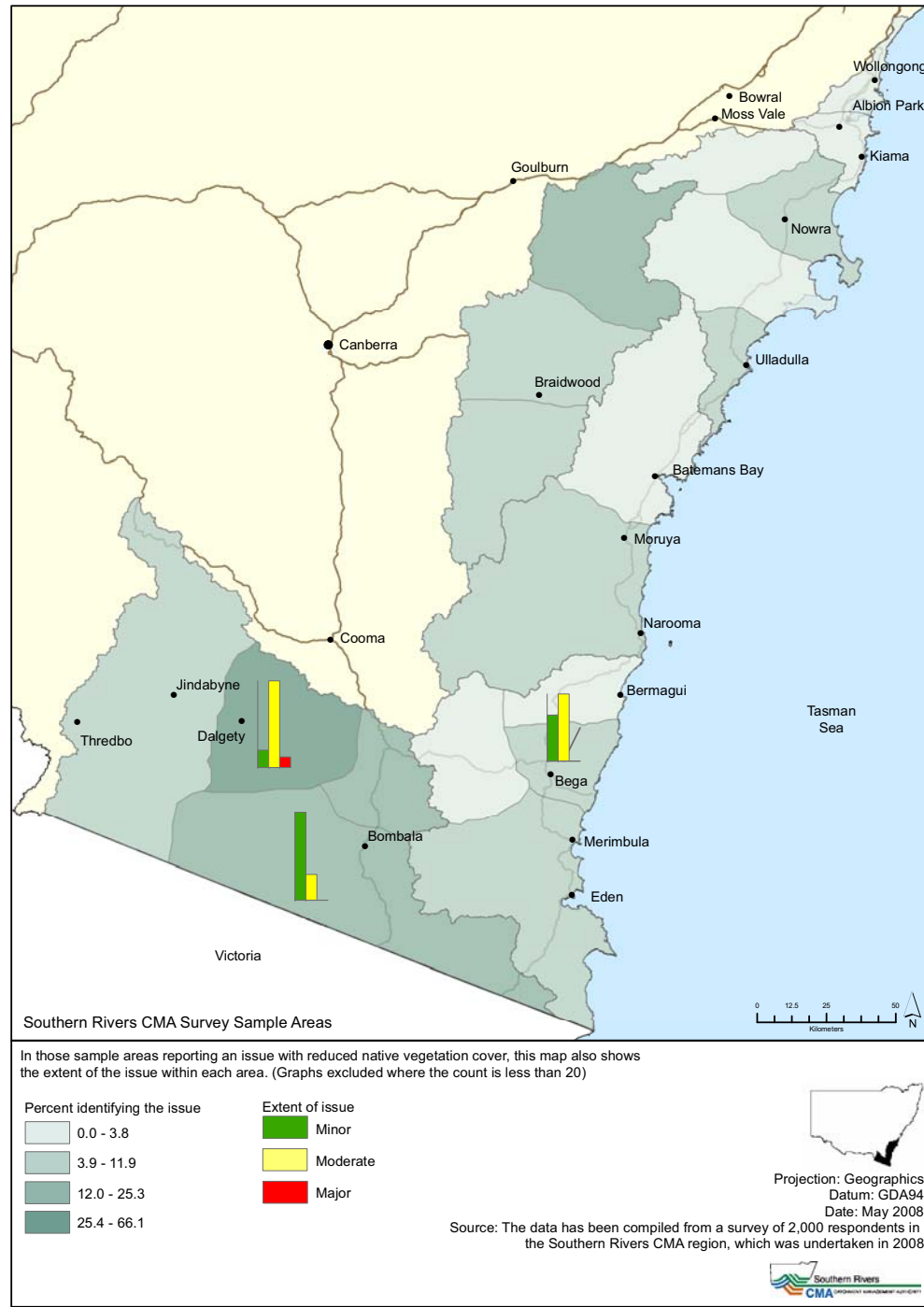
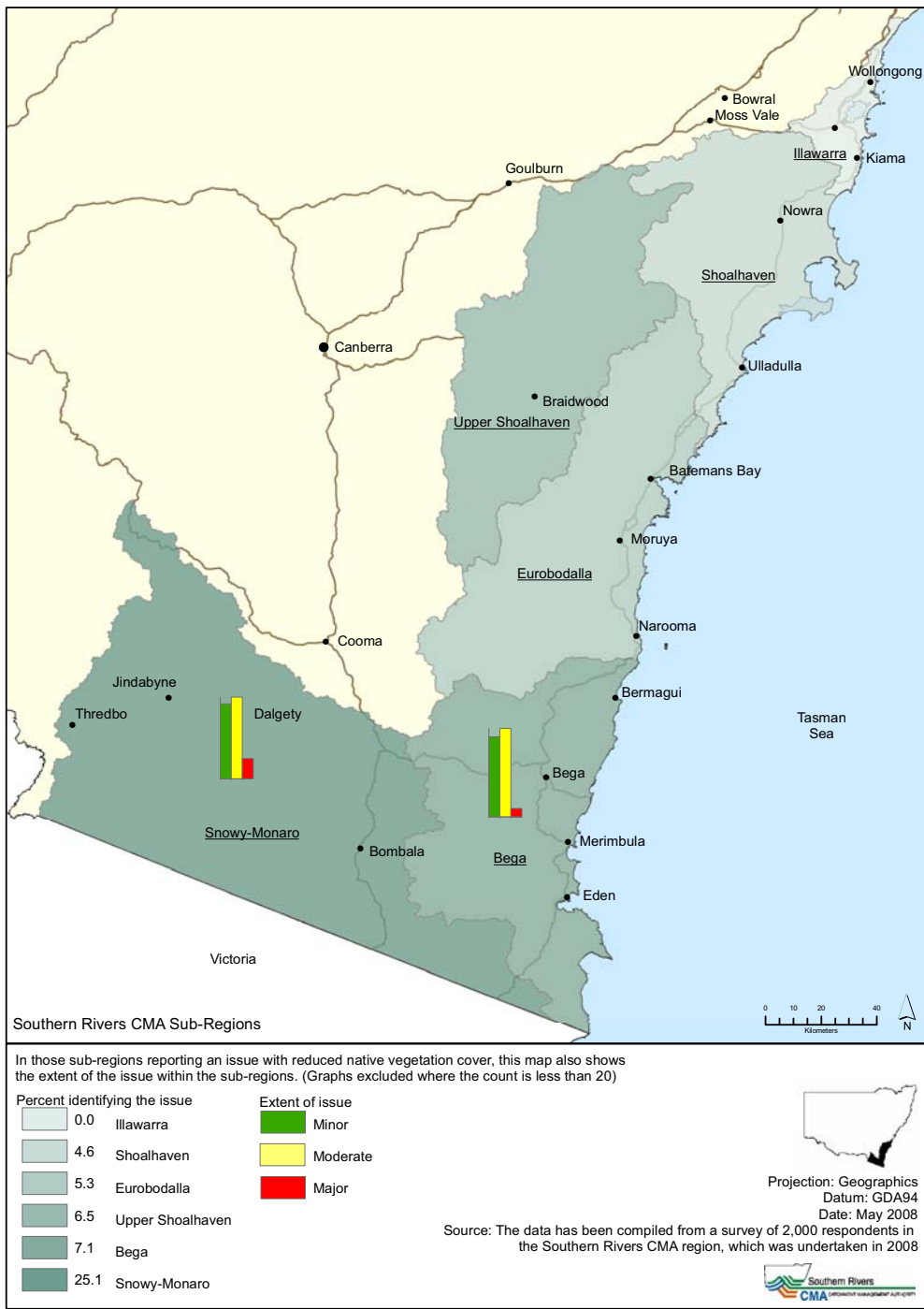
0.0 - 3.8
3.9 - 11.9
12.0 - 25.3
25.4 - 66.1

Projection: Geographics
Datum: GDA94
Date: May 2008

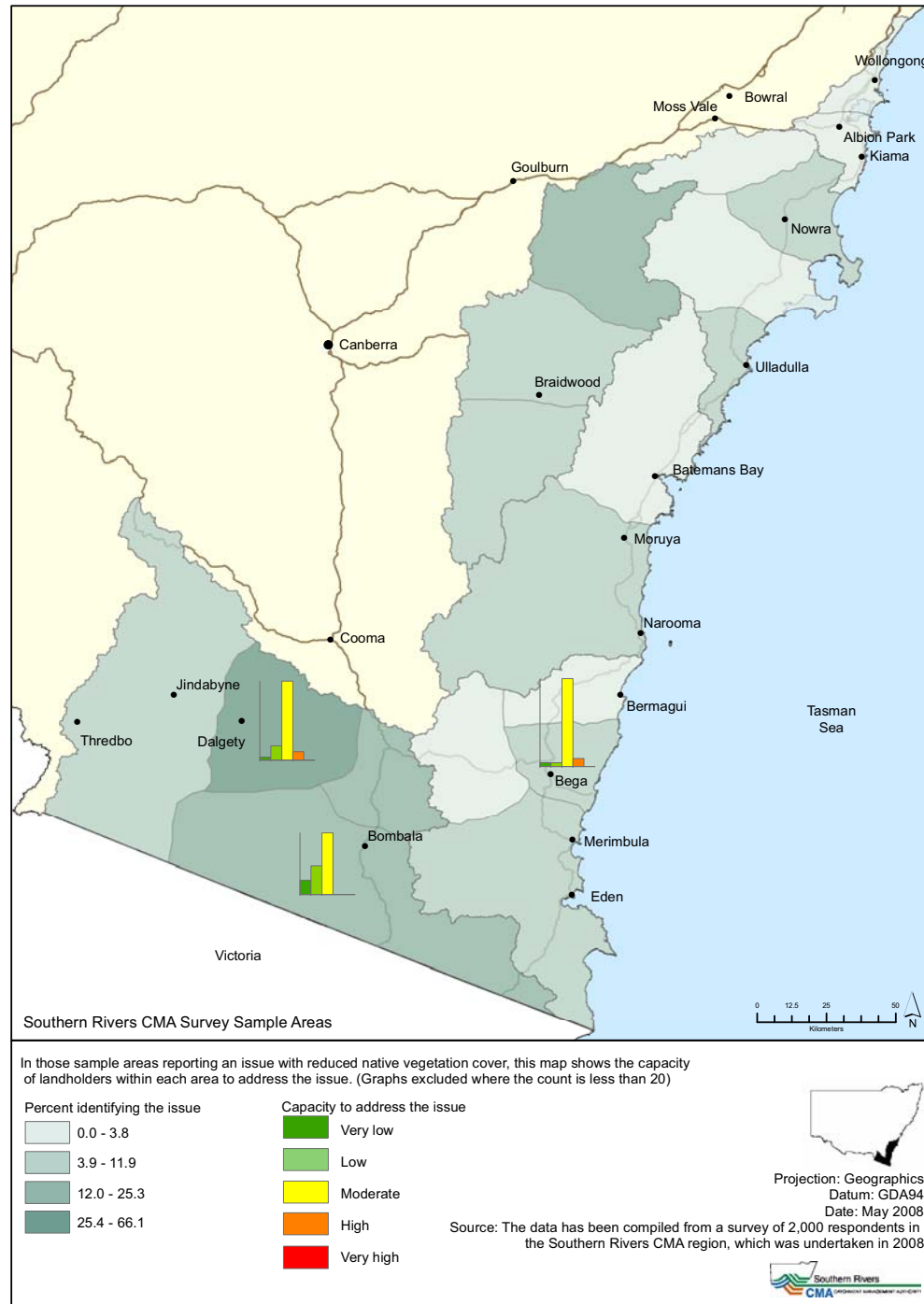
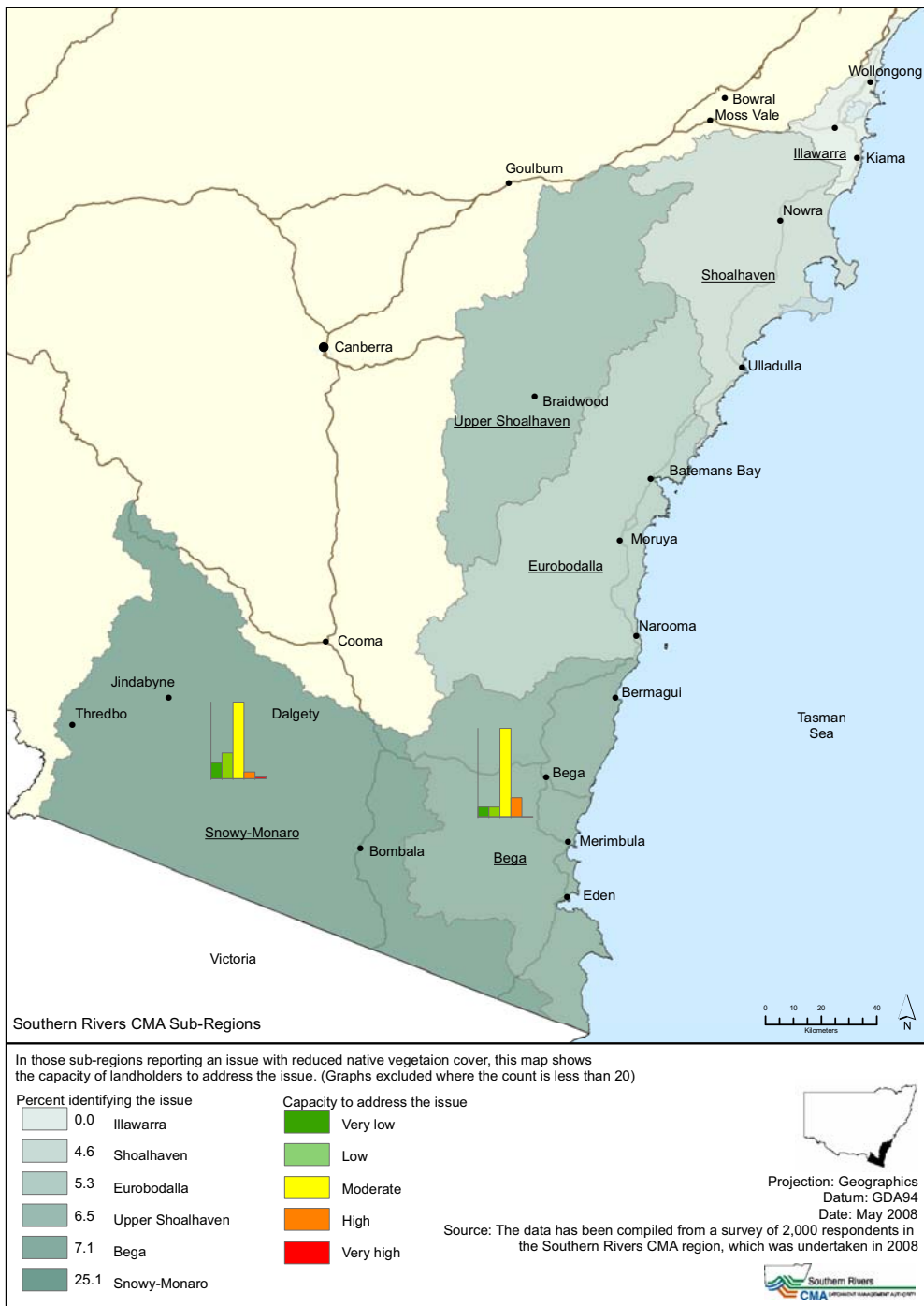
Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



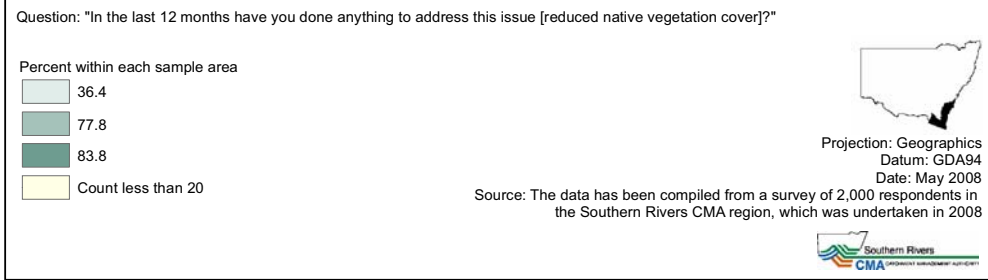
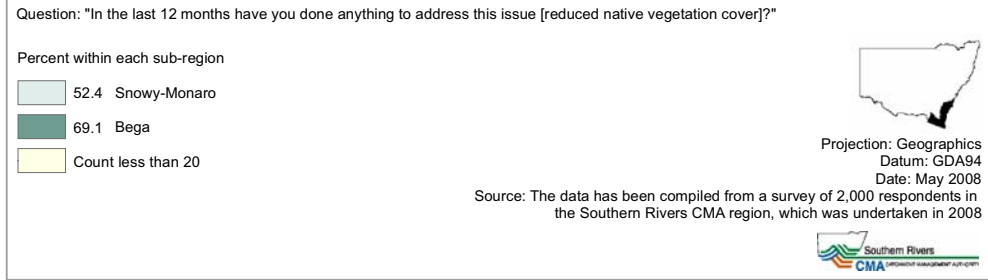
34. EXTENT OF ISSUE WITH REDUCED NATIVE VEGETATION COVER



35. CAPACITY TO ADDRESS REDUCED NATIVE VEGETATION COVER



36. PERCENT UNDERTAKING ACTION TO ADDRESS REDUCED NATIVE VEGETATION COVER



37. PERCENT REPORTING POOR CONDITION OF NATIVE VEGETATION



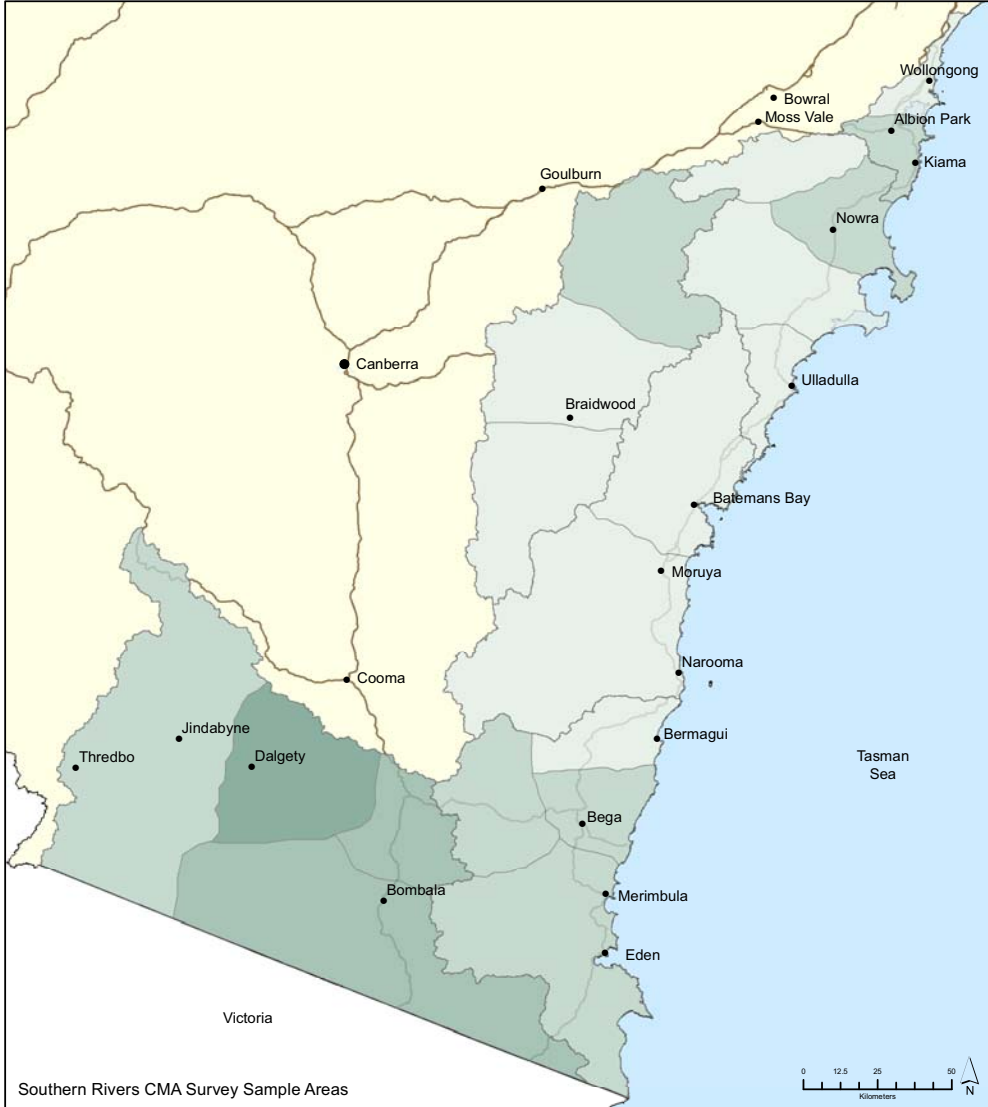

Question: "Could you tell me if [the poor condition of native vegetation] has been an issue on your land in the last two years?"

Percent within each sub-region

4.0	Shoalhaven
4.2	Illawarra
4.7	Upper Shoalhaven
5.3	Eurobodalla
12.0	Bega
24.2	Snowy-Monaro

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008




Question: "Could you tell me if [the poor condition of native vegetation] has been an issue on your land in the last two years?"

Percent within each sample area

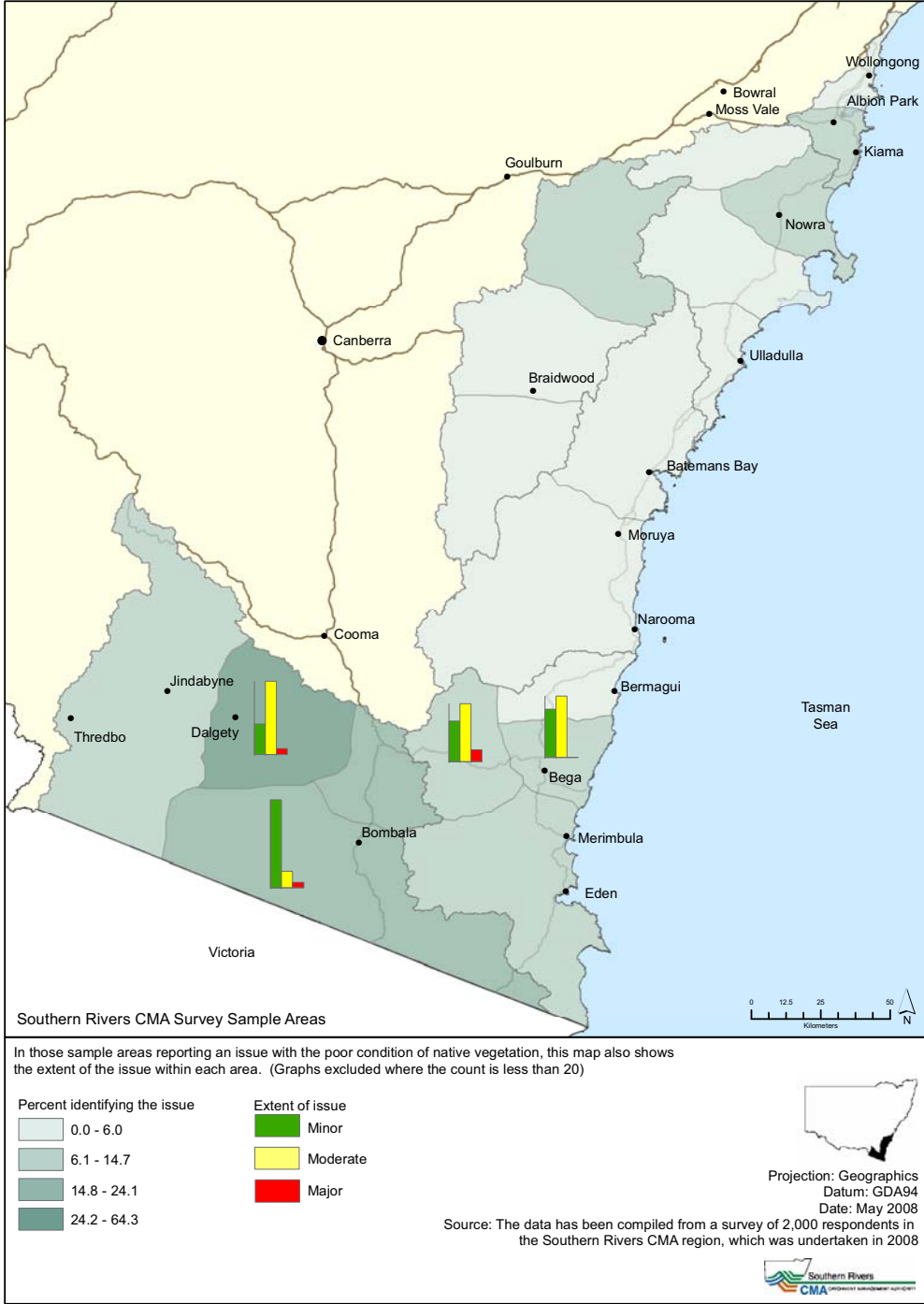
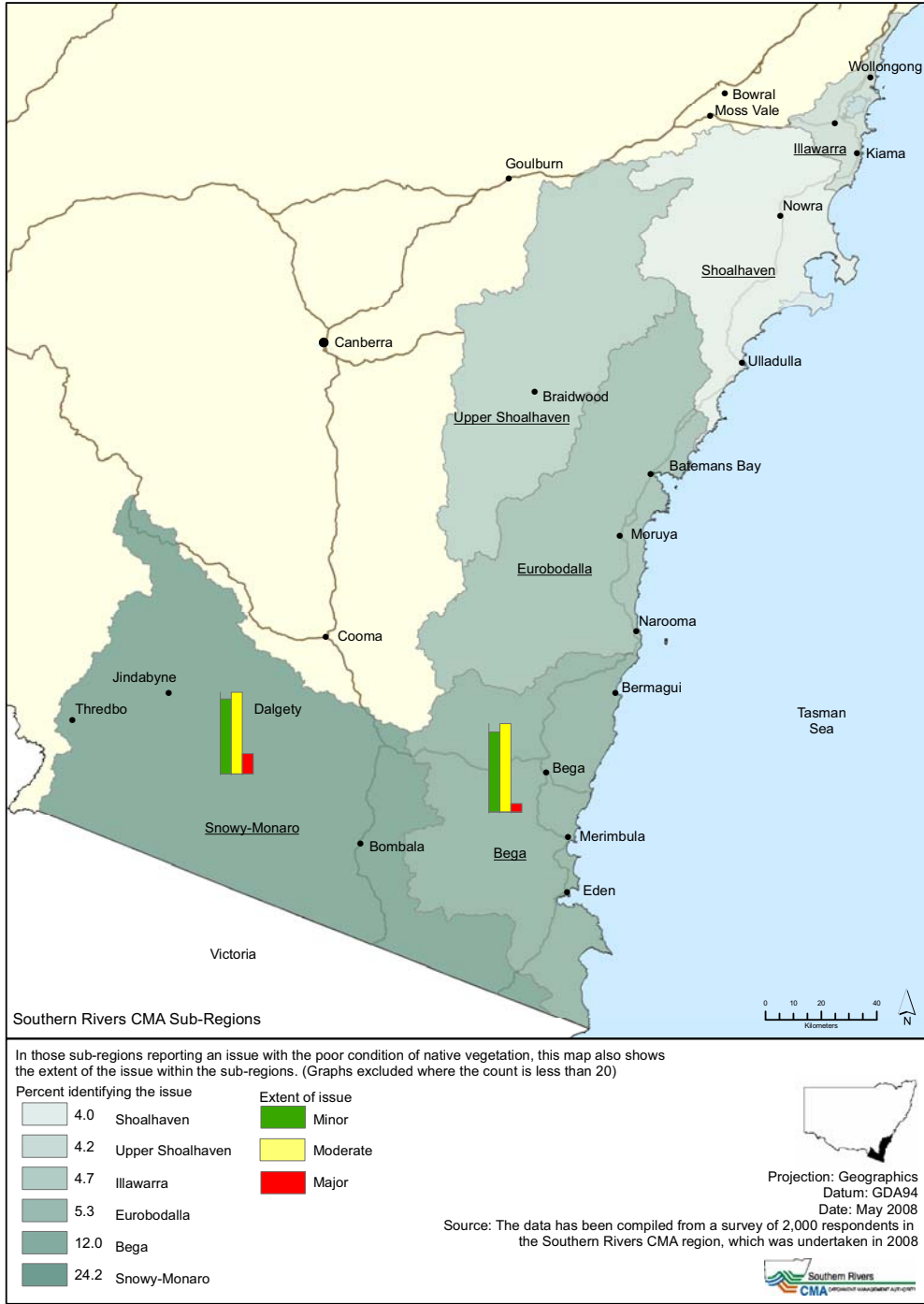
0.0 - 6.0
6.1 - 14.7
14.8 - 24.1
24.2 - 64.3

Projection: Geographics
Datum: GDA94
Date: May 2008

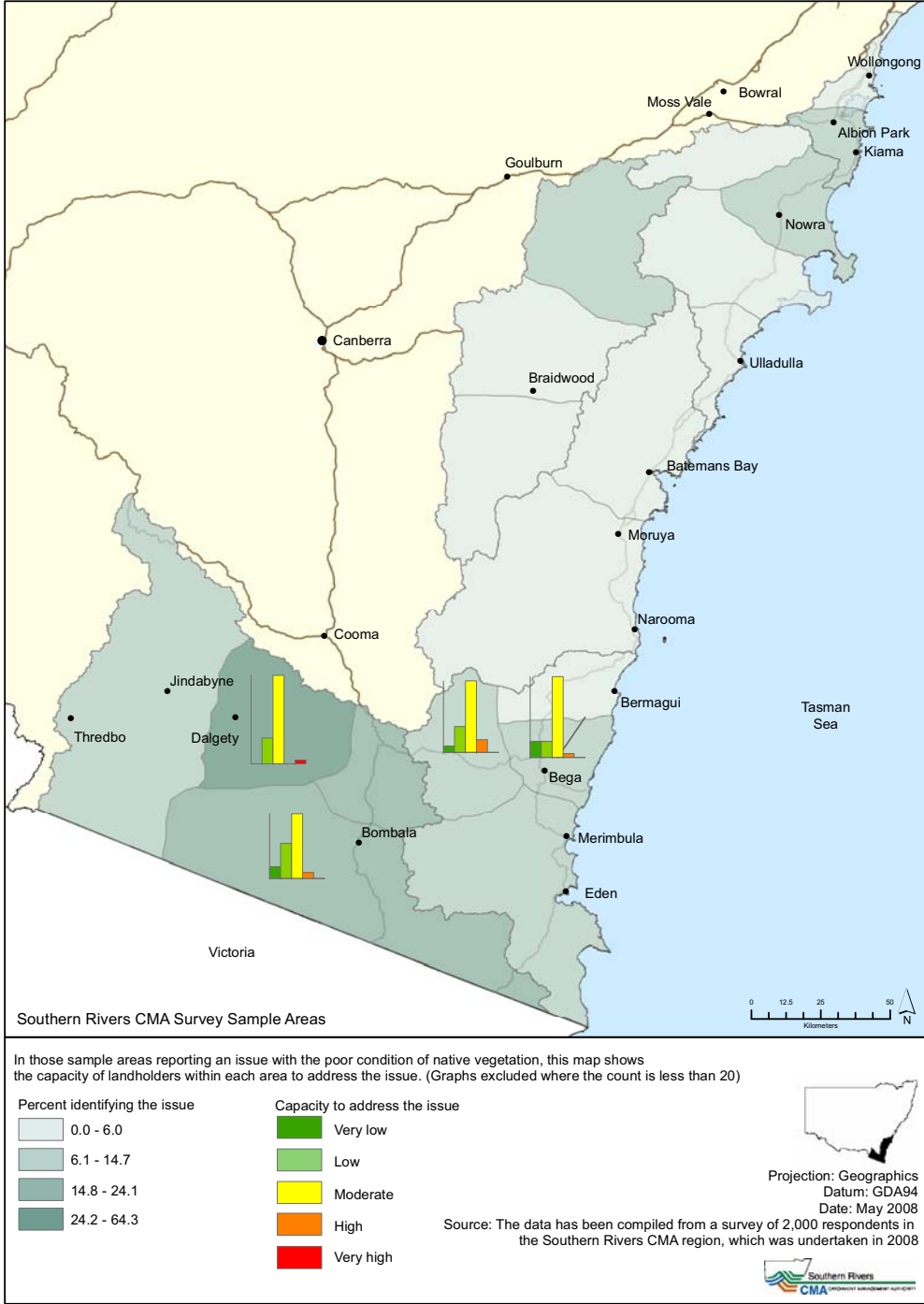
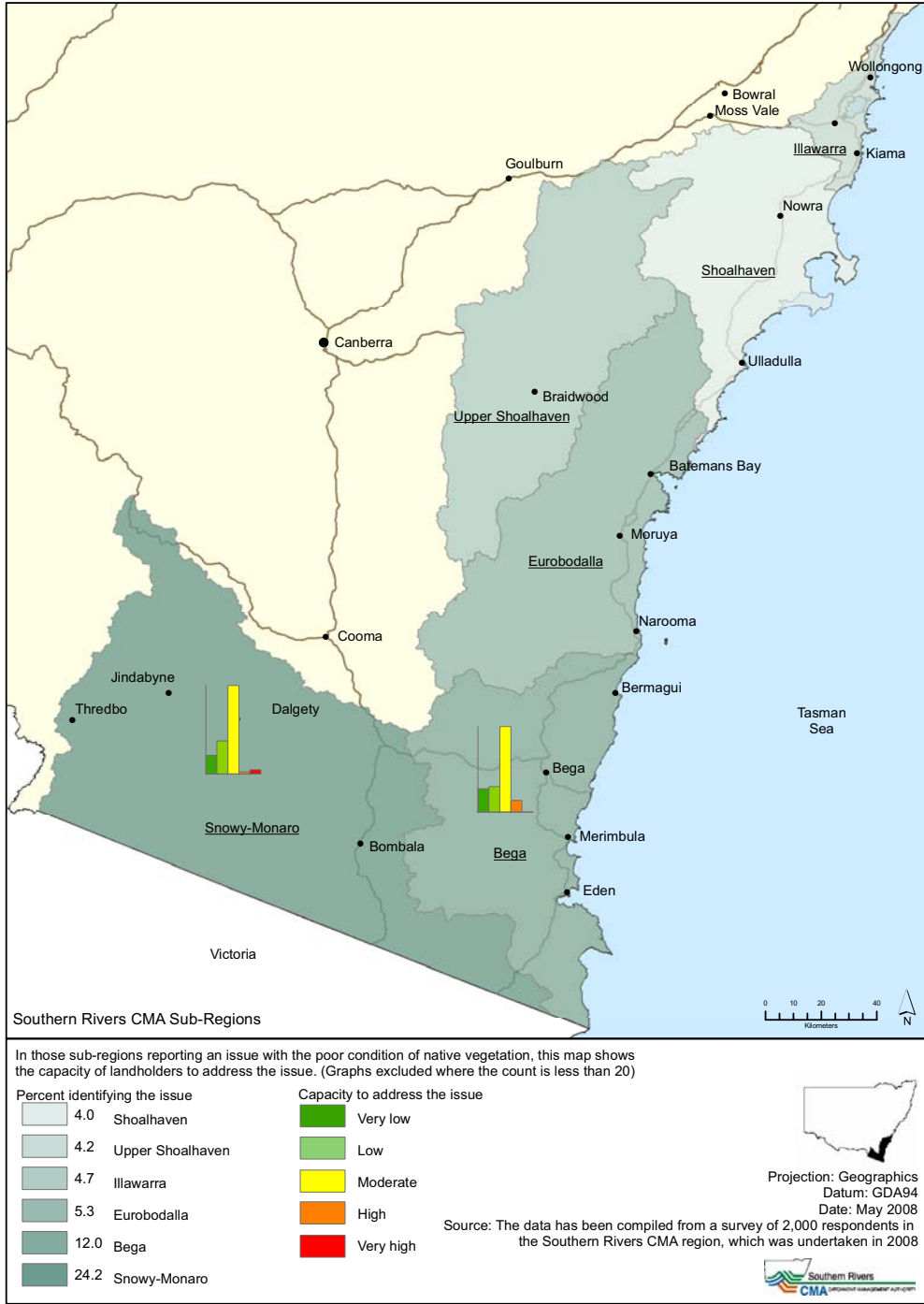
Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



38. EXTENT OF ISSUE WITH POOR CONDITION OF NATIVE VEGETATION



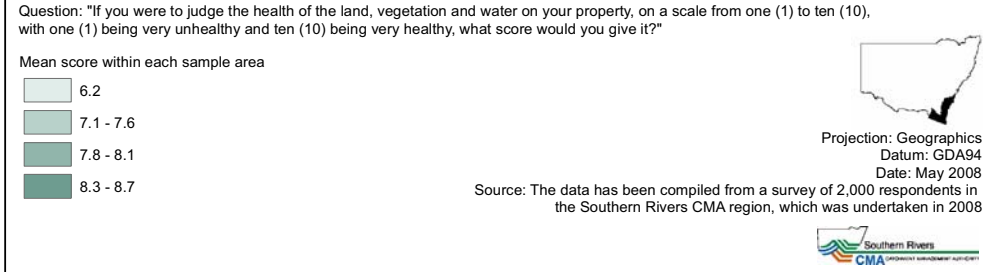
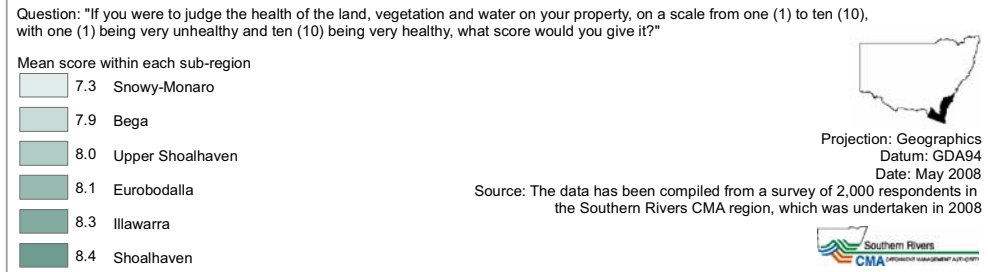
39. CAPACITY TO ADDRESS POOR CONDITION OF NATIVE VEGETATION



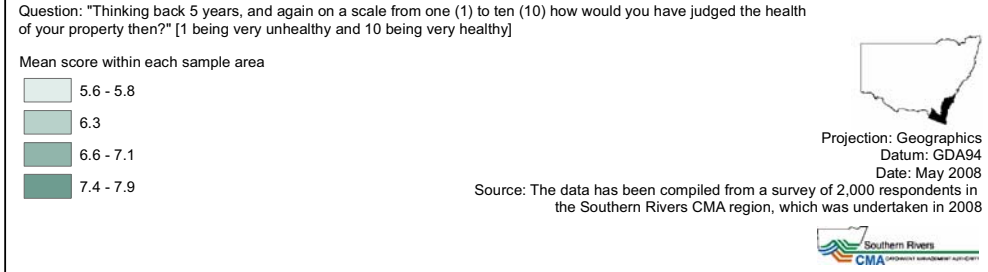
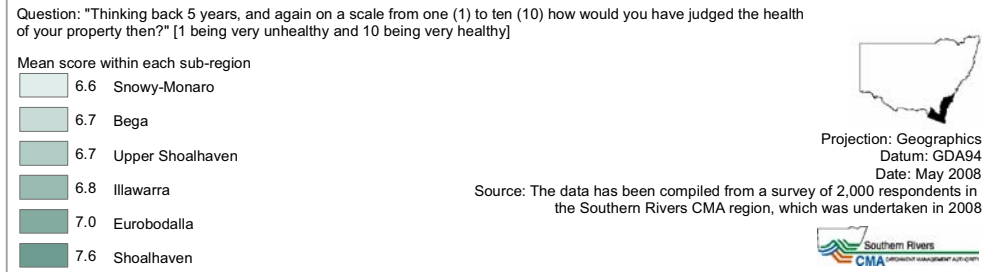
40. PERCENT UNDERTAKING ACTION TO ADDRESS POOR CONDITION OF NATIVE VEGETATION



41. THE CURRENT HEALTH OF LAND, VEGETATION AND WATER ON PROPERTIES



42. THE HEALTH OF LAND, VEGETATION AND WATER ON PROPERTIES FIVE YEARS AGO



43. CHANGE IN THE HEALTH OF LAND, VEGETATION AND WATER ON PROPERTIES IN FIVE YEARS



The change in the health of properties is obtained by subtracting the current health score for the property from the score for five years ago. (high positive scores indicate an improvement in health; high negative scores indicate properties have become unhealthy)

Mean score within each sub-region

0.7	Snowy-Monaro
0.8	Shoalhaven
1.1	Eurobodalla
1.2	Bega
1.3	Upper Shoalhaven
1.5	Illawarra

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



The change in the health of properties is obtained by subtracting the current health score for the property from the score for five years ago. (high positive scores indicate an improvement in health; high negative scores indicate properties have become unhealthy)

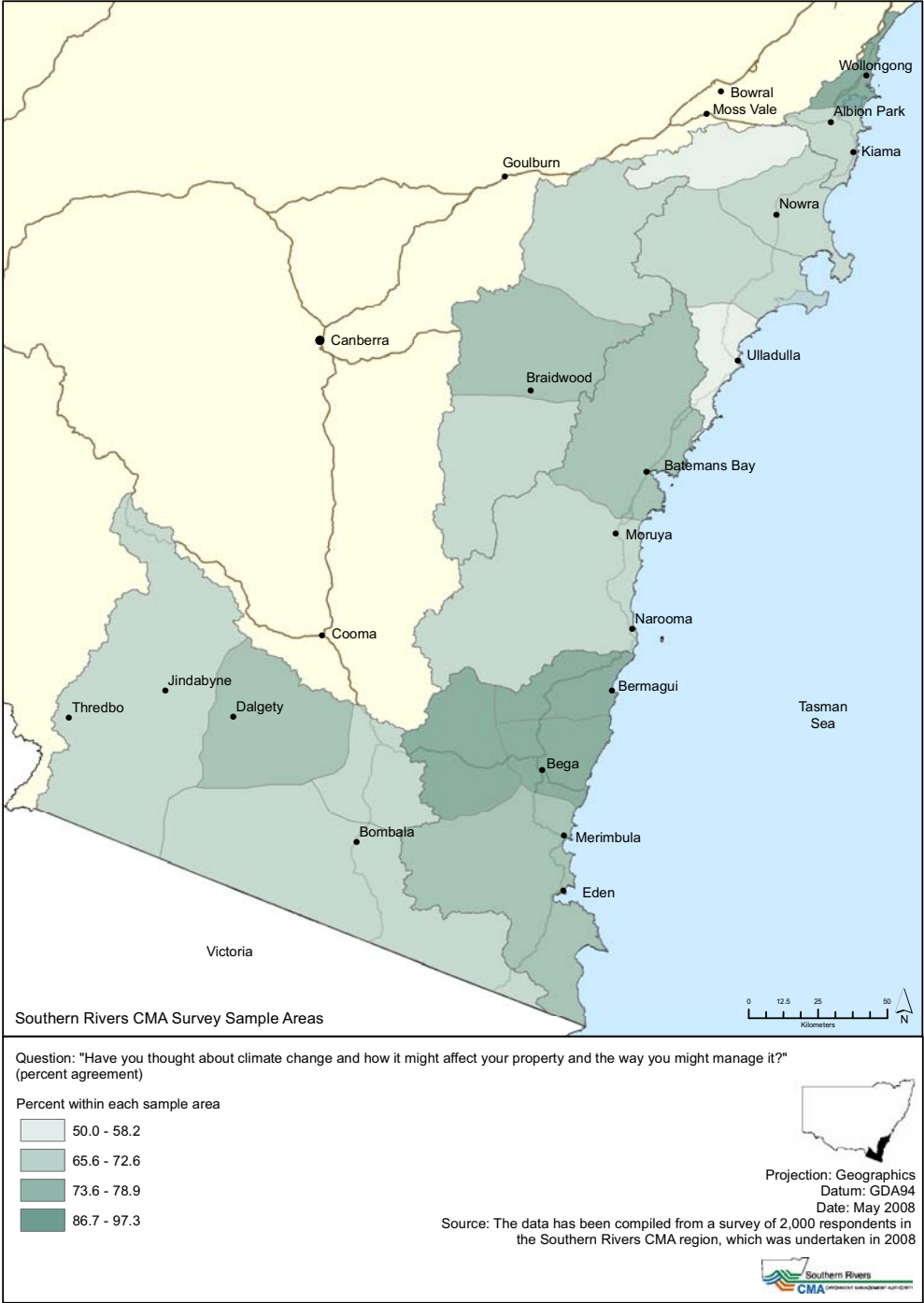
Mean score within each sample area

-0.7
0.7 - 0.9
1.1 - 1.3
1.5 - 2.1

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008

44. INFLUENCE OF CLIMATE CHANGE



45. THE OCCURANCE OF NATIVE VEGETATION ON PROPERTIES



Question: "Native vegetation includes all the trees, plants, ground cover and native pasture that occurs naturally or is indigenous on your property. Do you have any native vegetation on your property?"

Percent within each sub-region

71.7	Upper Shoalhaven
74.3	Shoalhaven
80.9	Snowy-Monaro
88.6	Bega
89.3	Eurobodalla
94.2	Illawarra

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



Question: "Native vegetation includes all the trees, plants, ground cover and native pasture that occurs naturally or is indigenous on your property. Do you have any native vegetation on your property?"

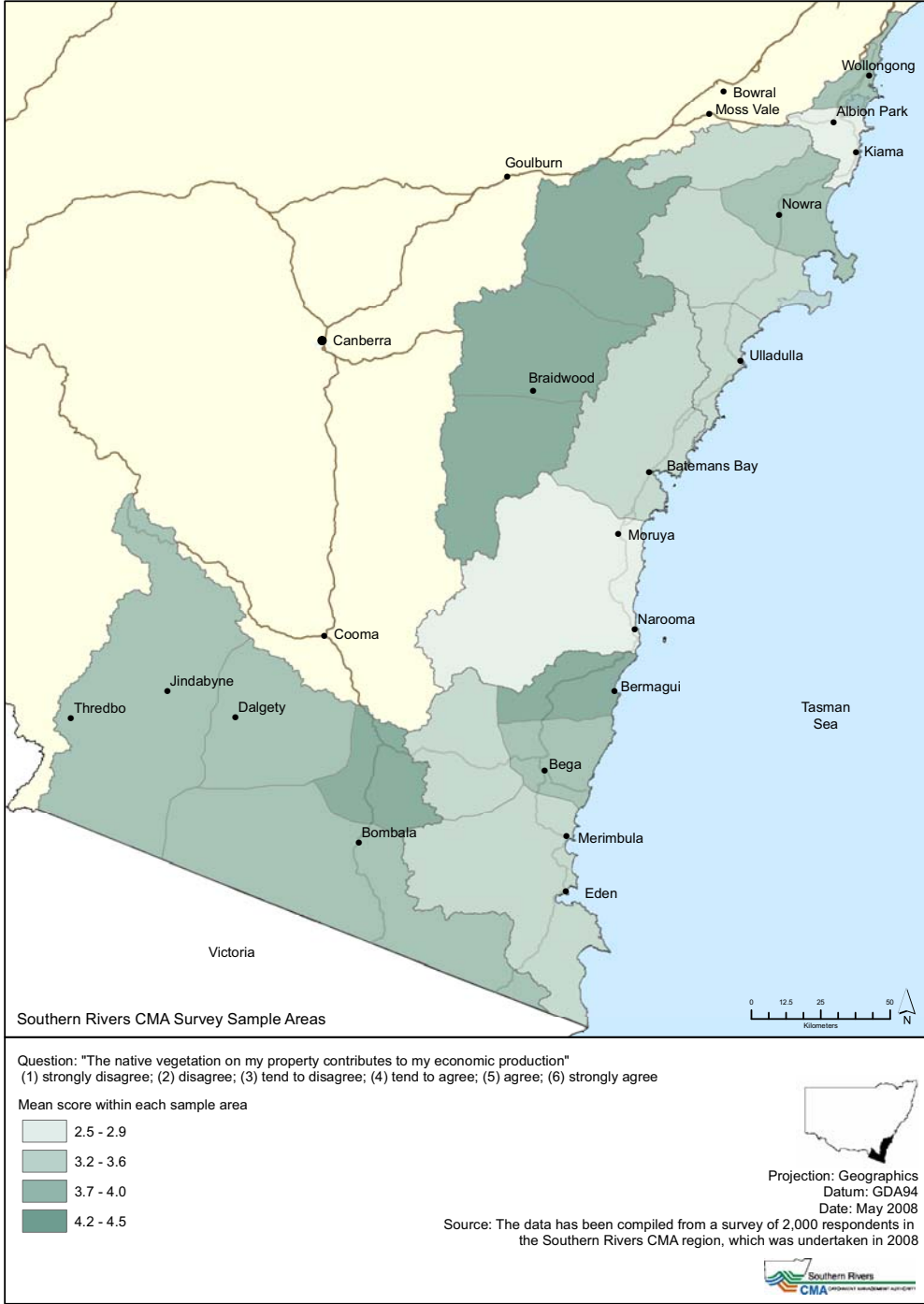
Percent within each sample area

63.4 - 73.3
82.3 - 85.5
88.9 - 90.7
92.0 - 94.9

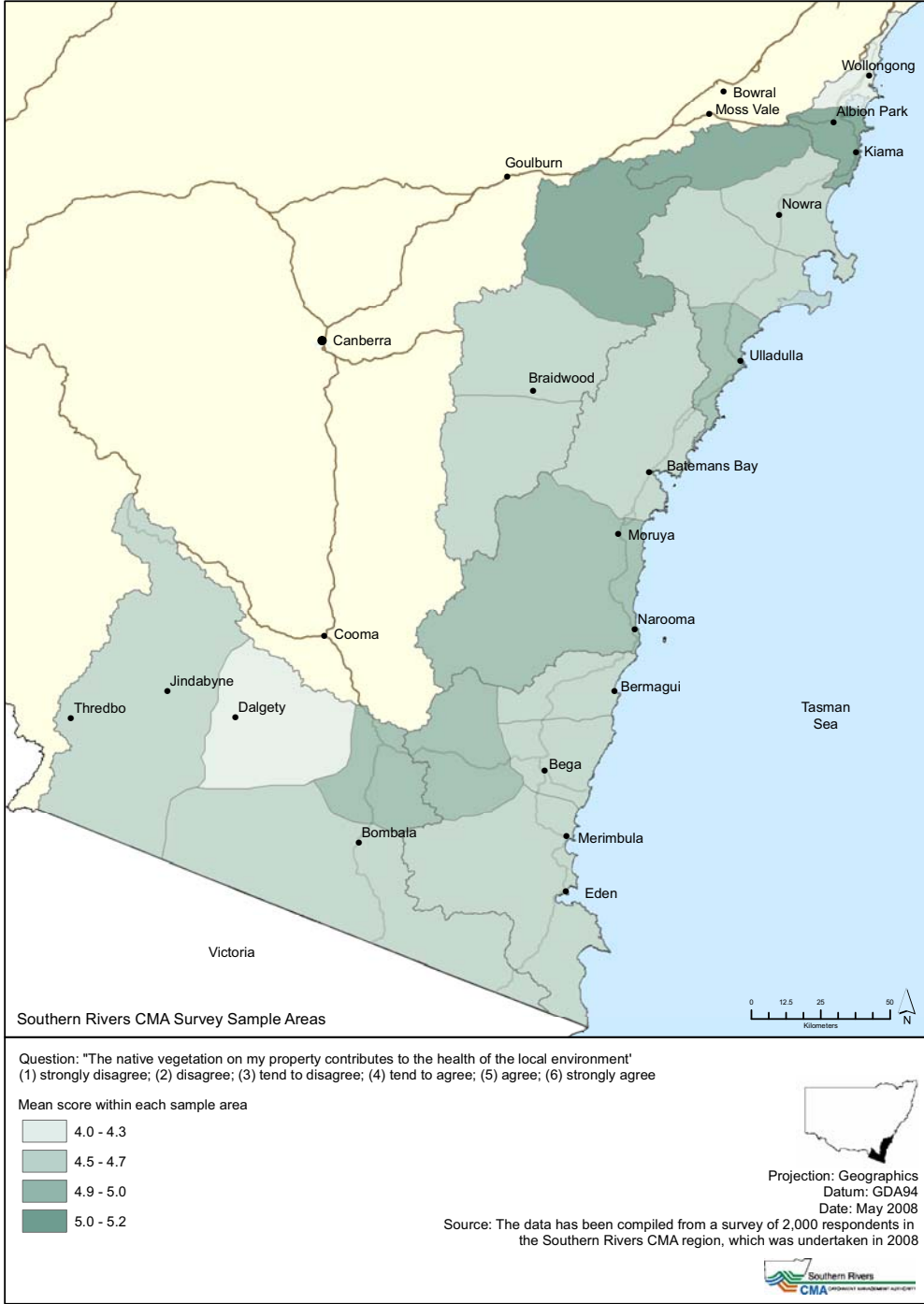
Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008

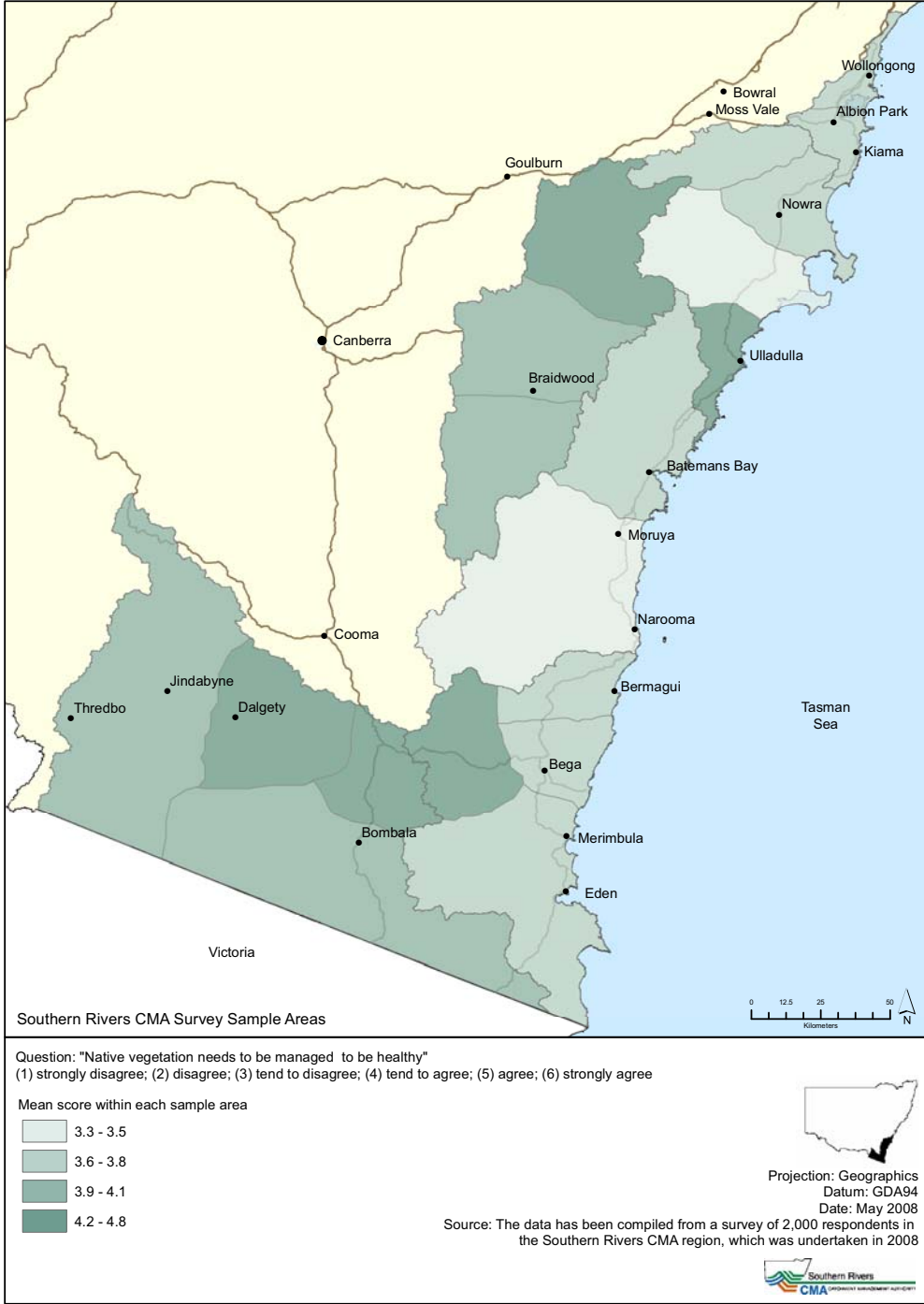
46. BELIEFS ABOUT NATIVE VEGETATION AND ECONOMIC PRODUCTION



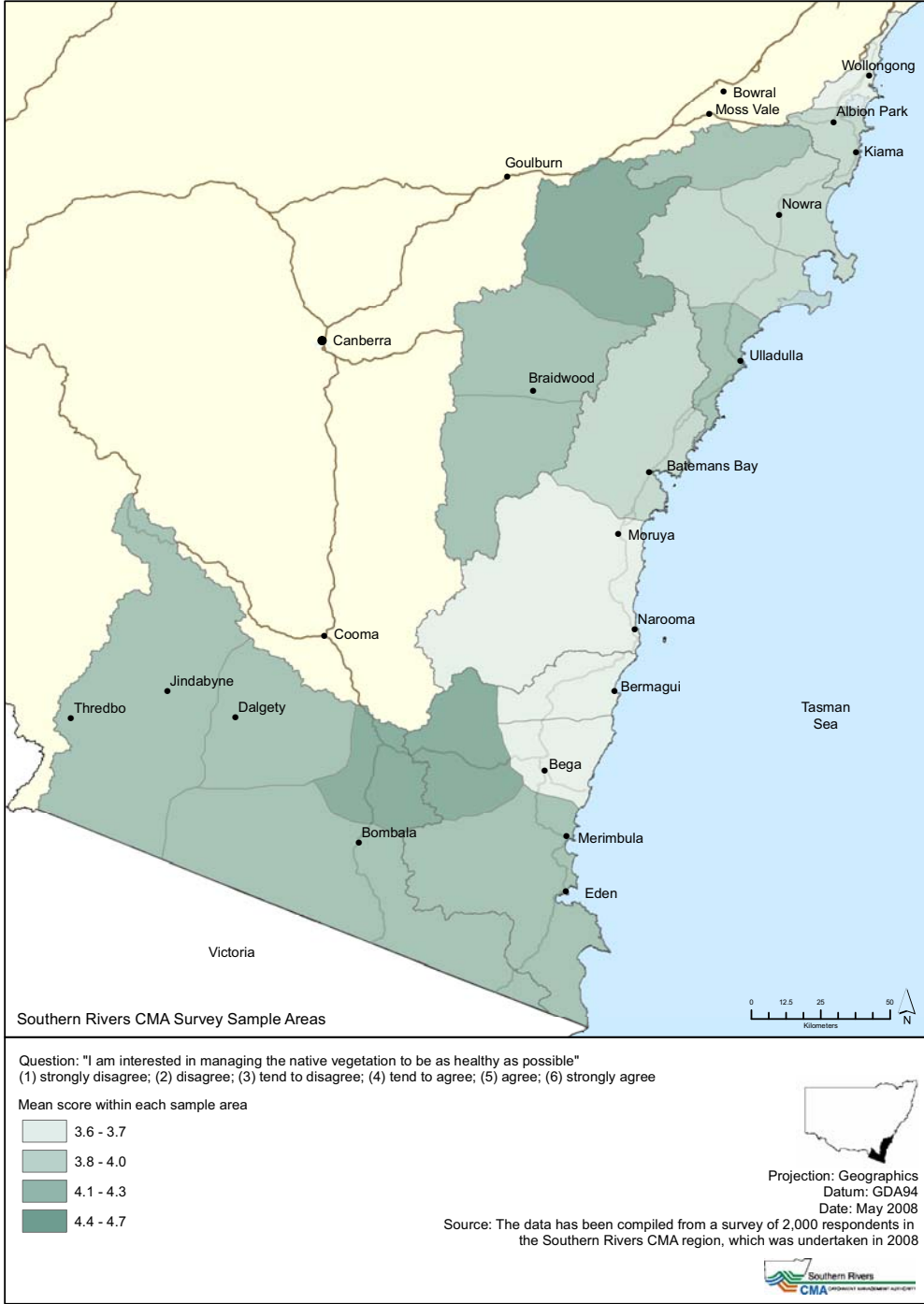
47. BELIEFS ABOUT NATIVE VEGETATION AND THE HEALTH OF THE LOCAL ENVIRONMENT



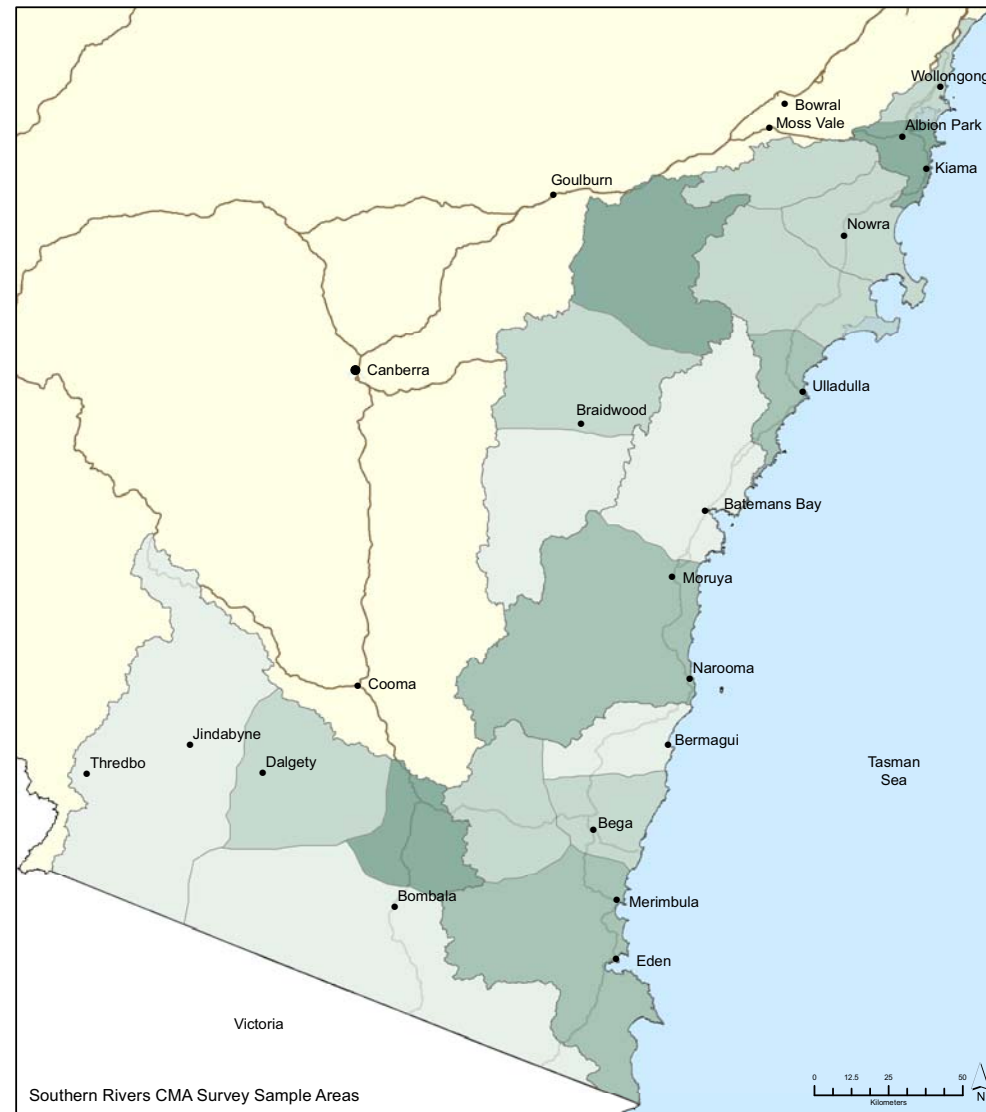
48. BELIEFS ABOUT THE MANAGEMENT OF NATIVE VEGETATION



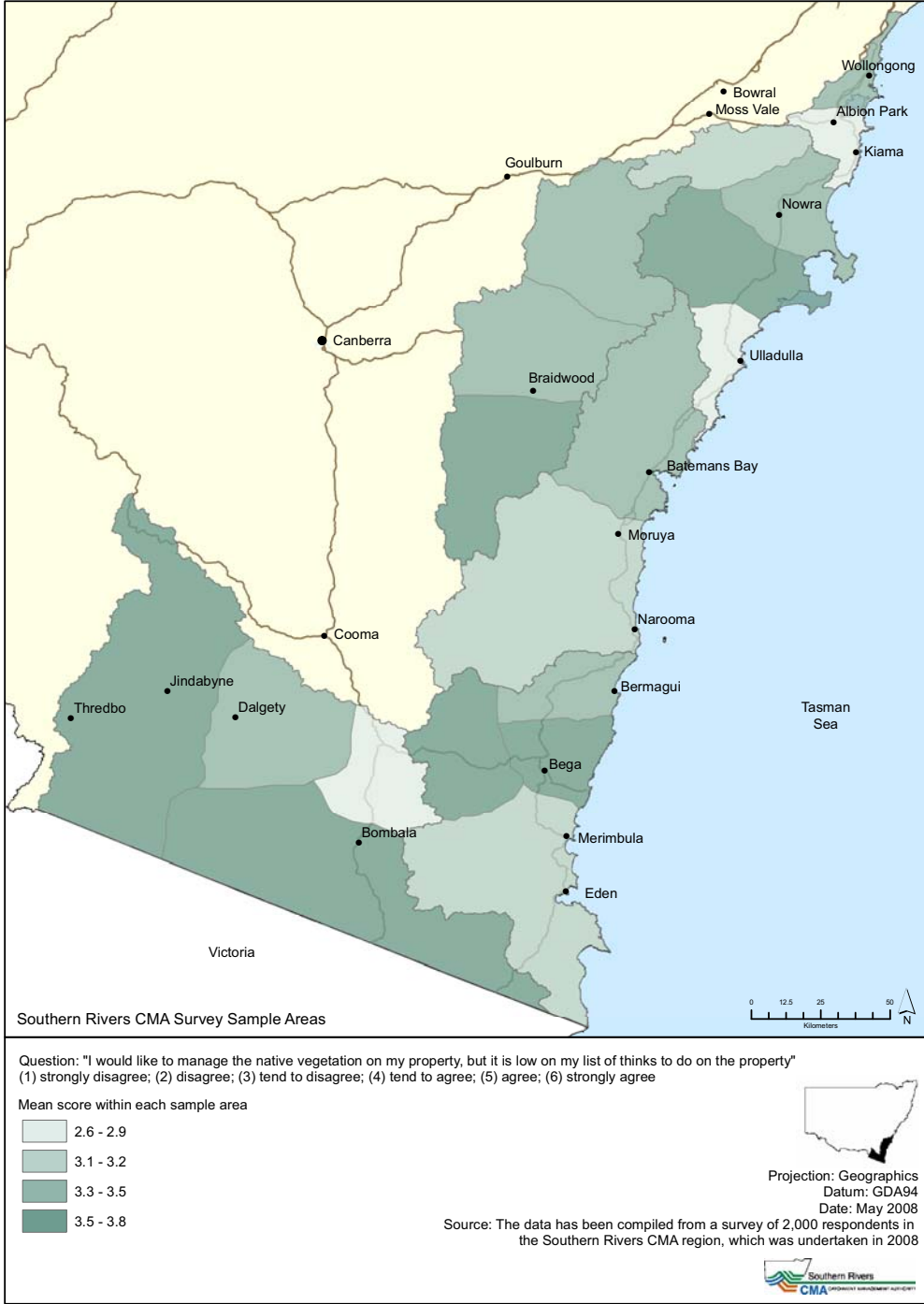
49. INTEREST IN THE MANAGEMENT OF NATIVE VEGETATION



50. KNOWLEDGE OF NATIVE PLANTS ON PROPERTY



51. MOTIVATION TO MANAGE NATIVE VEGETATION



52. WILLINGNESS TO ACCEPT ADVICE ABOUT MANAGING NATIVE VEGETATION



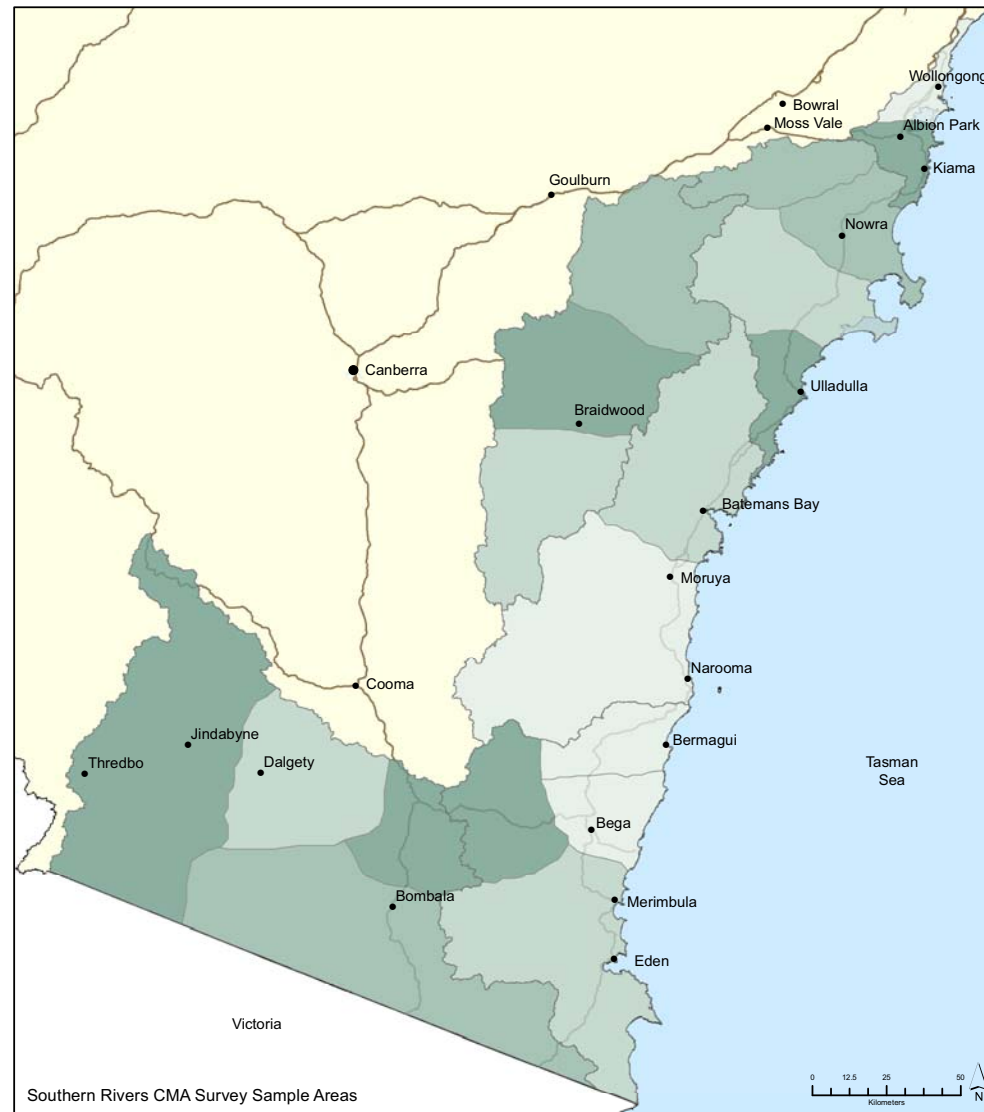
Question: "I would accept advice on how to do more to manage the native vegetation on my property"
 (1) strongly disagree; (2) disagree; (3) tend to disagree; (4) tend to agree; (5) agree; (6) strongly agree

Mean score within each sub-region

3.71	Eurobodalla
3.77	Illawarra
3.88	Bega
4.14	Shoalhaven
4.15	Upper Shoalhaven
4.26	Snowy-Monaro

Projection: Geographics
 Datum: GDA94
 Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



Question: "I would accept advice on how to do more to manage the native vegetation on my property"
 (1) strongly disagree; (2) disagree; (3) tend to disagree; (4) tend to agree; (5) agree; (6) strongly agree

Mean score within each sample area

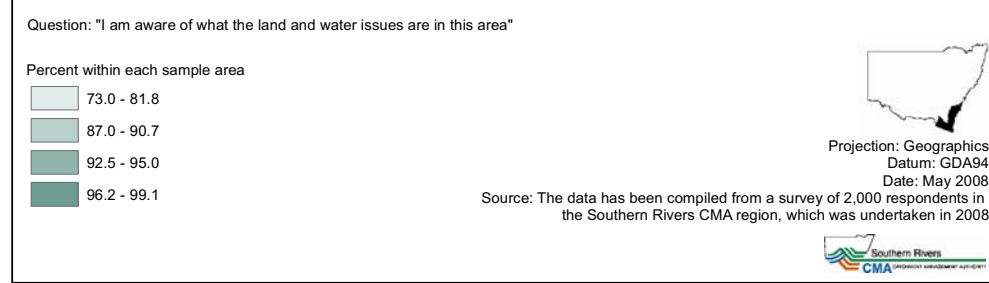
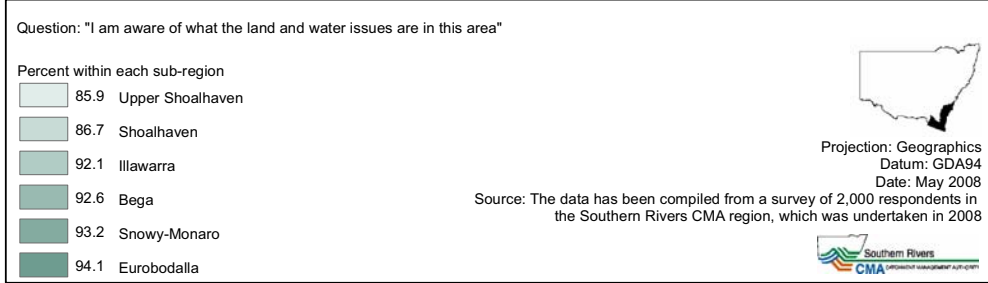
3.5 - 3.7
3.9 - 4.0
4.1 - 4.2
4.3 - 4.6

Projection: Geographics
 Datum: GDA94
 Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



53. CAPACITY: AWARENESS OF LAND AND WATER ISSUES



54. CAPACITY: INTEREST IN LAND AND WATER ISSUES

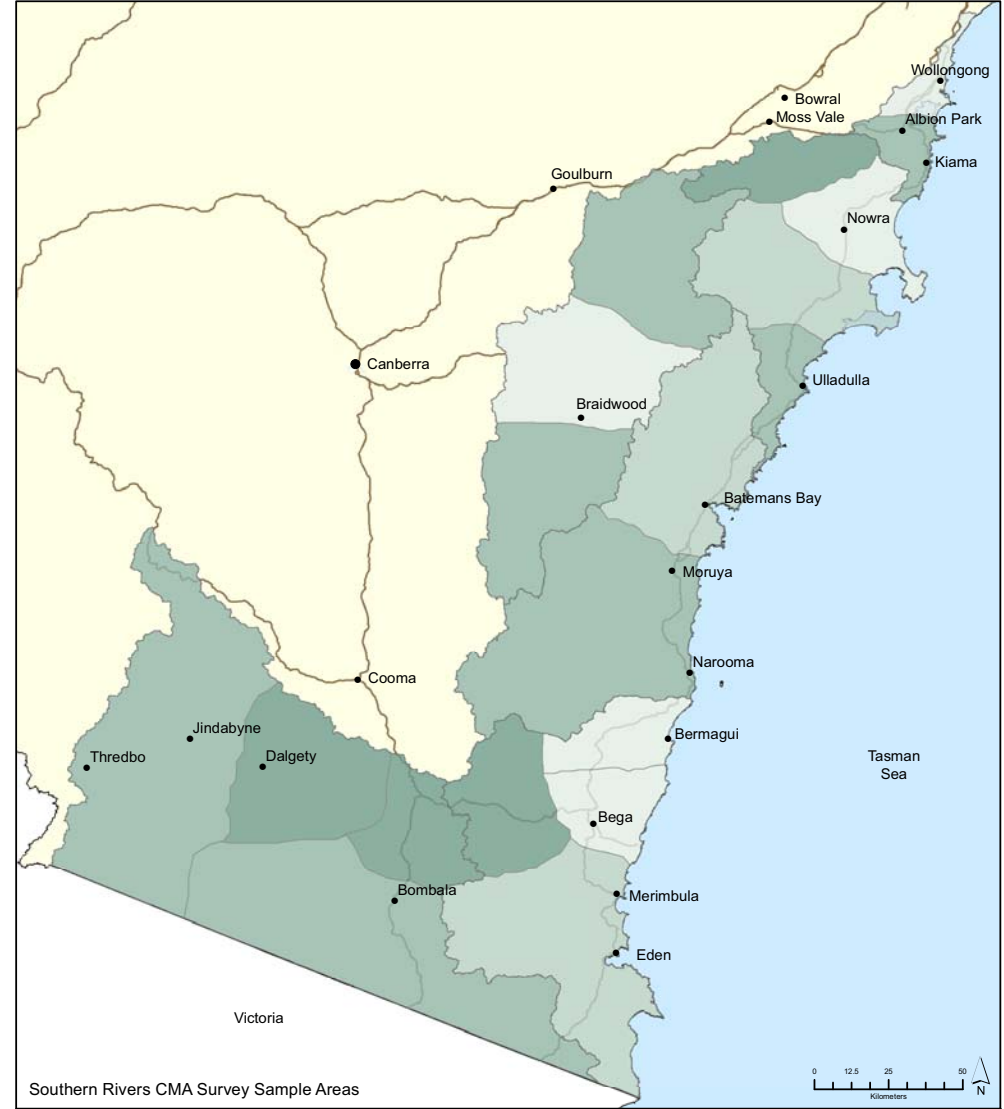


Question: "I am interested in finding out about land and water issues in this area"

Percent within each sub-region	
36.6	Upper Shoalhaven
37.4	Illawarra
41.6	Bega
49.7	Eurobodalla
50.4	Shoalhaven
65.4	Snowy-Monaro

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



Question: "I am interested in finding out about land and water issues in this area"

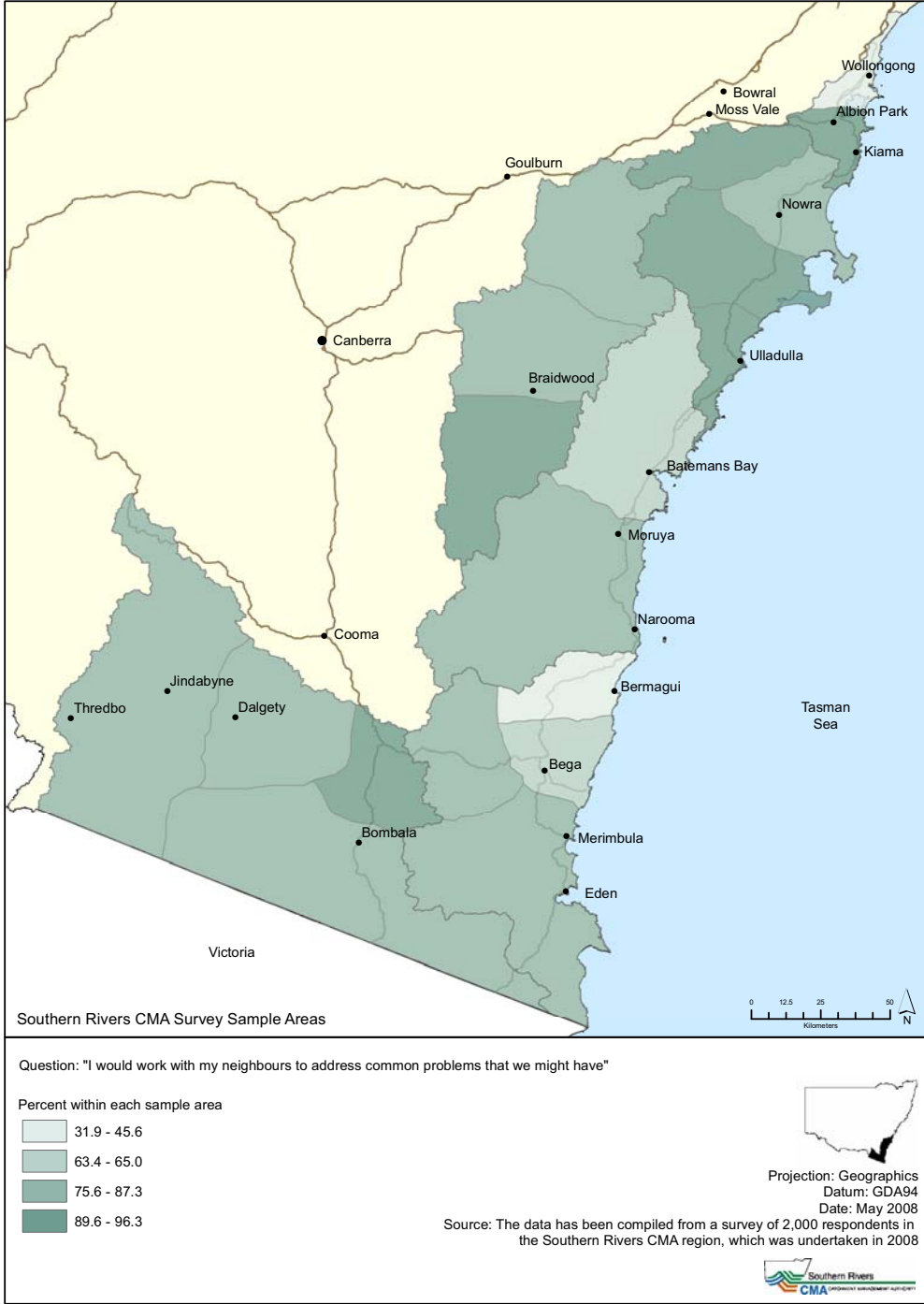
Percent within each sample area	
15.2 - 32.3	
41.3 - 48.2	
56.2 - 64.9	
72.1 - 81.8	

Projection: Geographics
Datum: GDA94
Date: May 2008

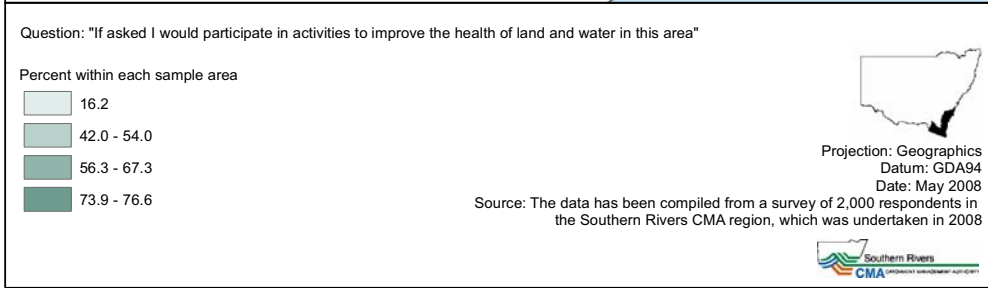
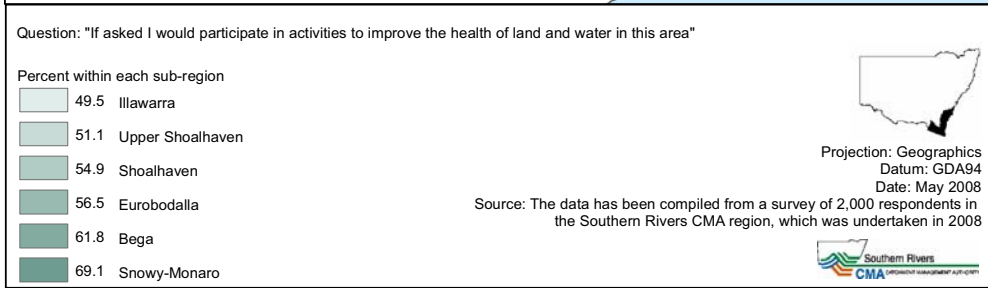
Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



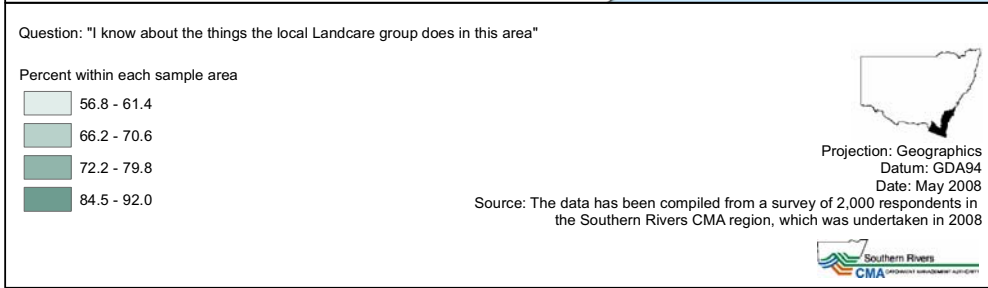
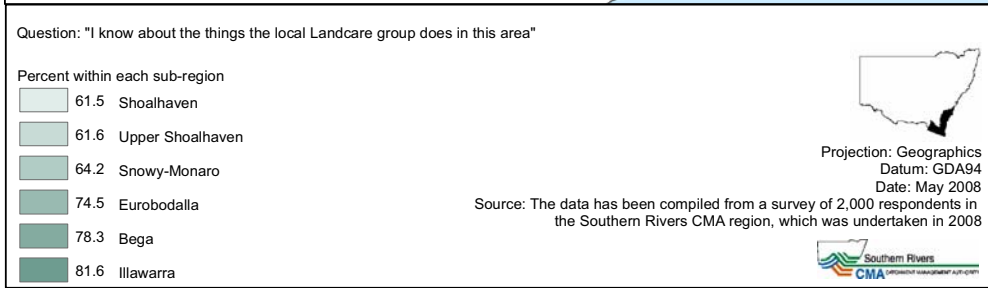
55. CAPACITY: COLLABORATIVE INVOLVEMENT IN LAND AND WATER ISSUES



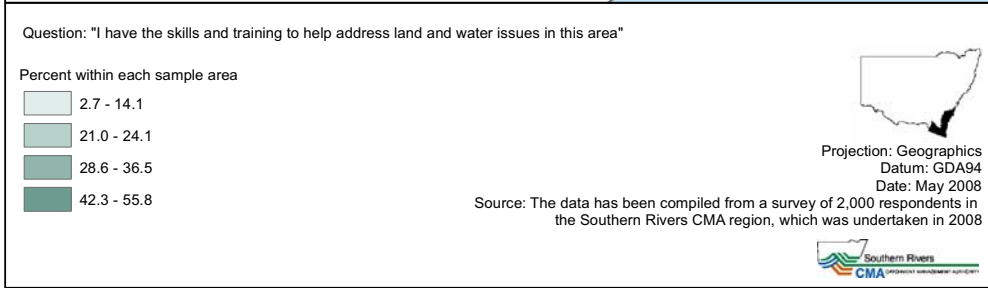
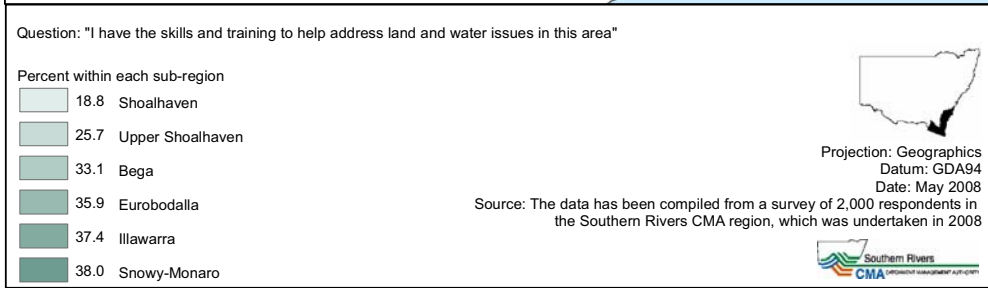
56. CAPACITY: PARTICIPATION IN LAND AND WATER ISSUES



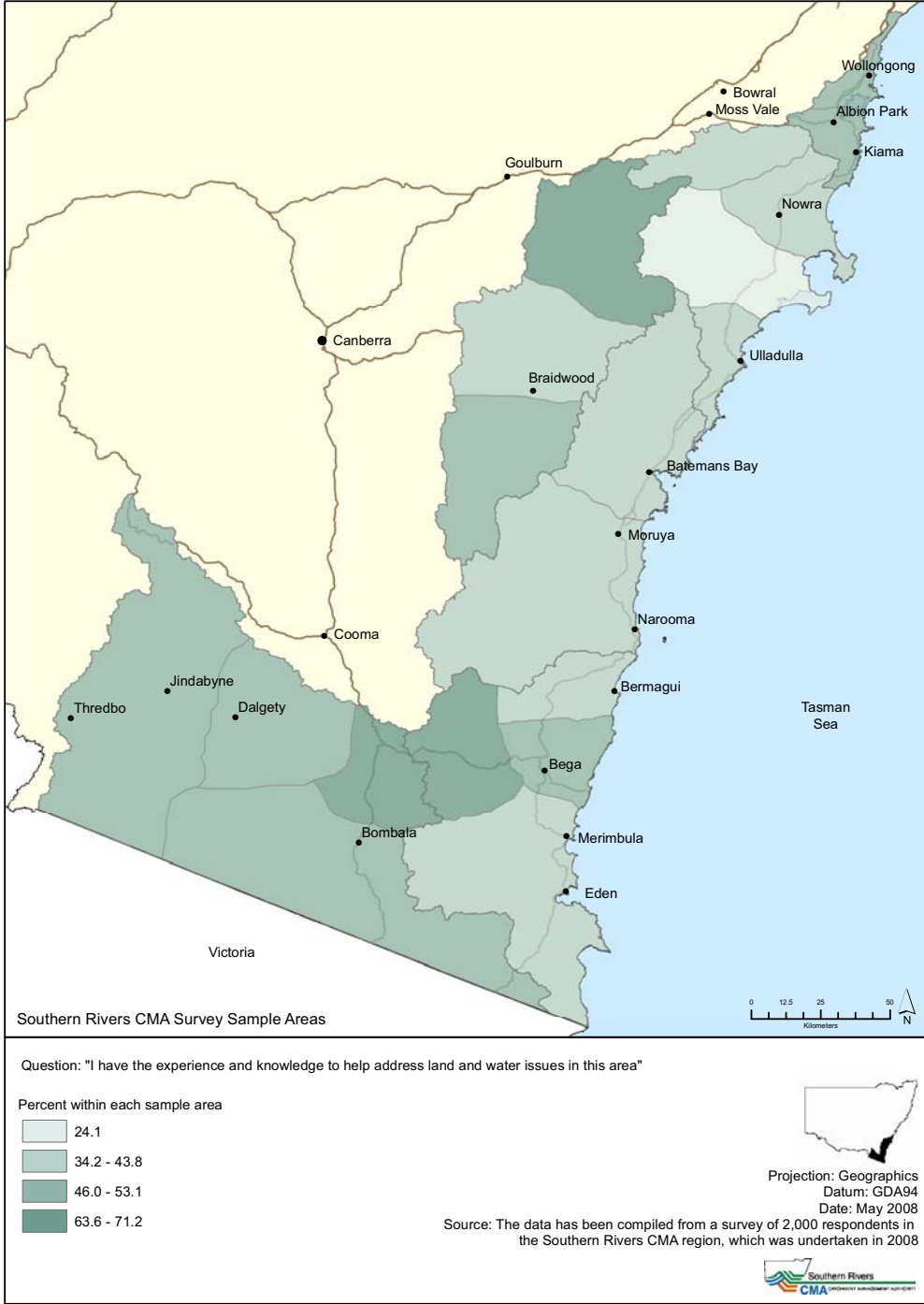
57. CAPACITY: KNOWLEDGE OF LOCAL LANDCARE GROUPS



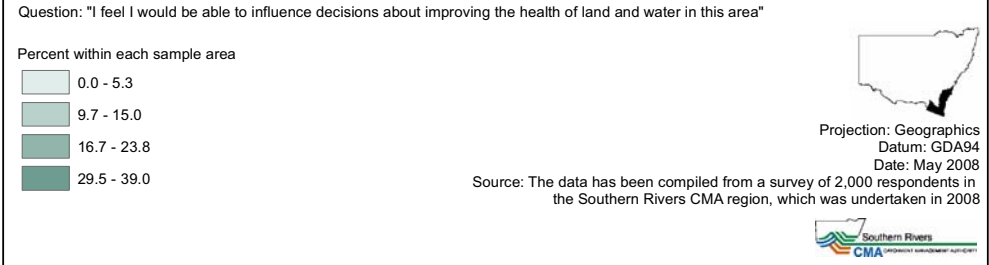
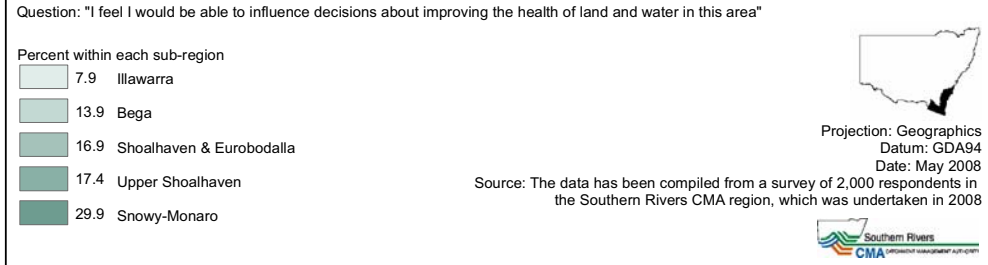
58. CAPACITY: SKILLS AND TRAINING



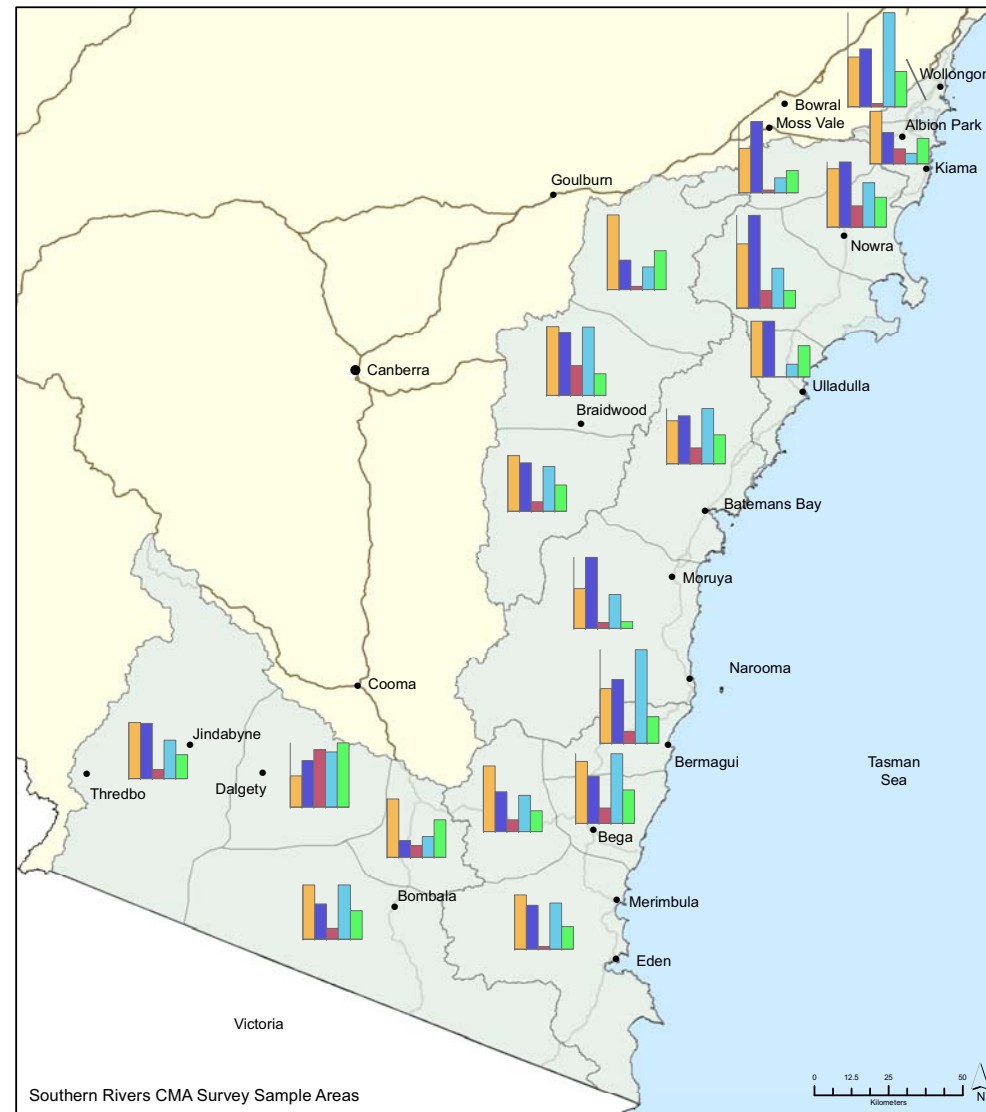
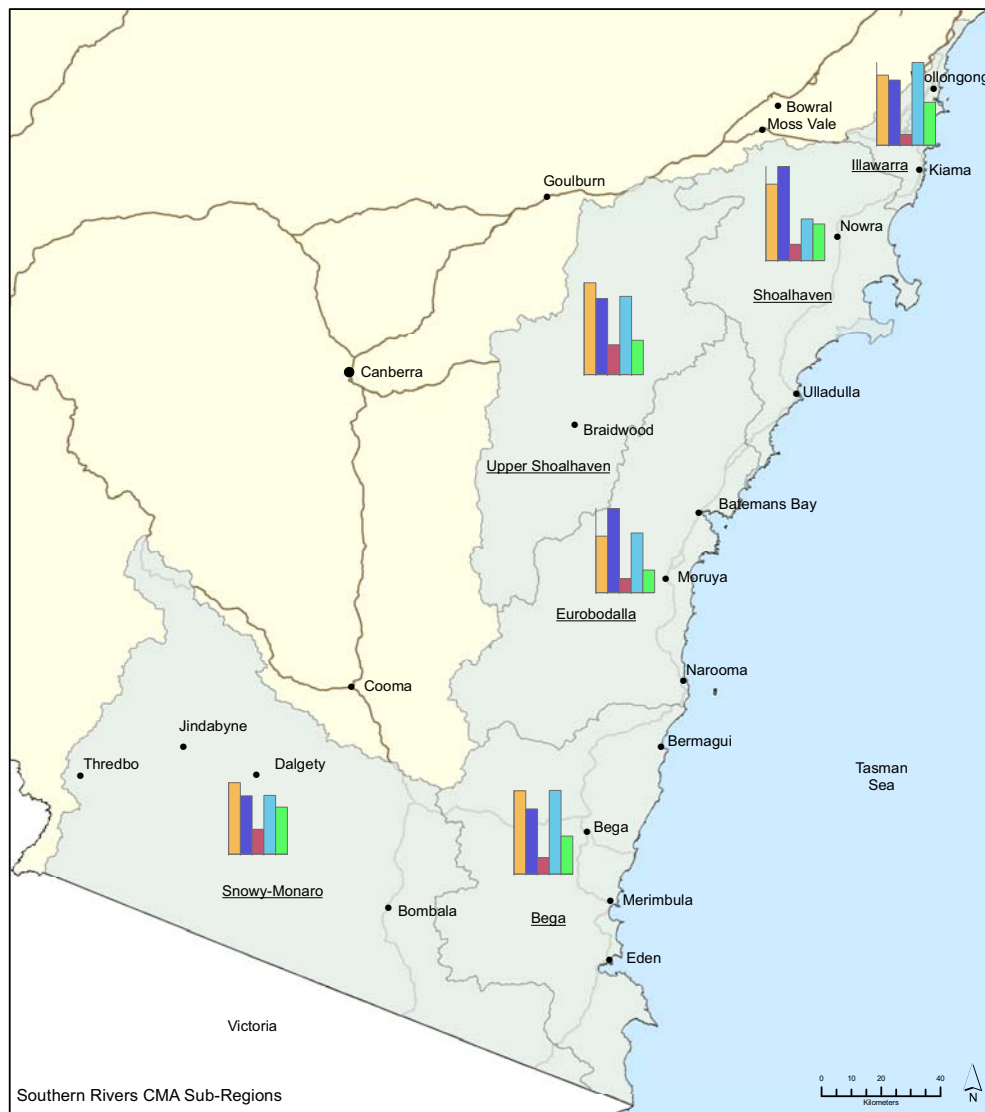
59. CAPACITY: EXPERIENCE AND KNOWLEDGE



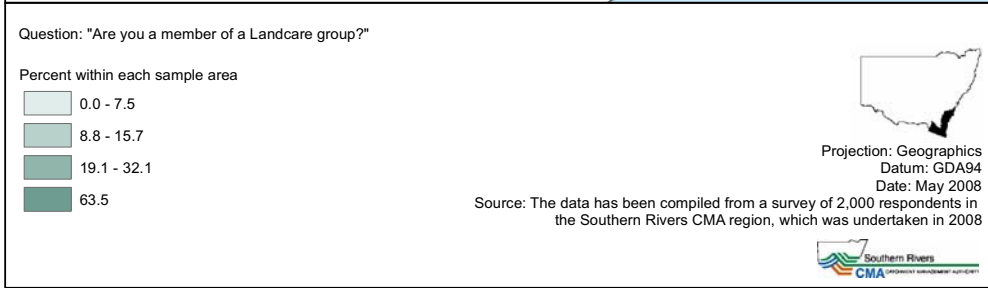
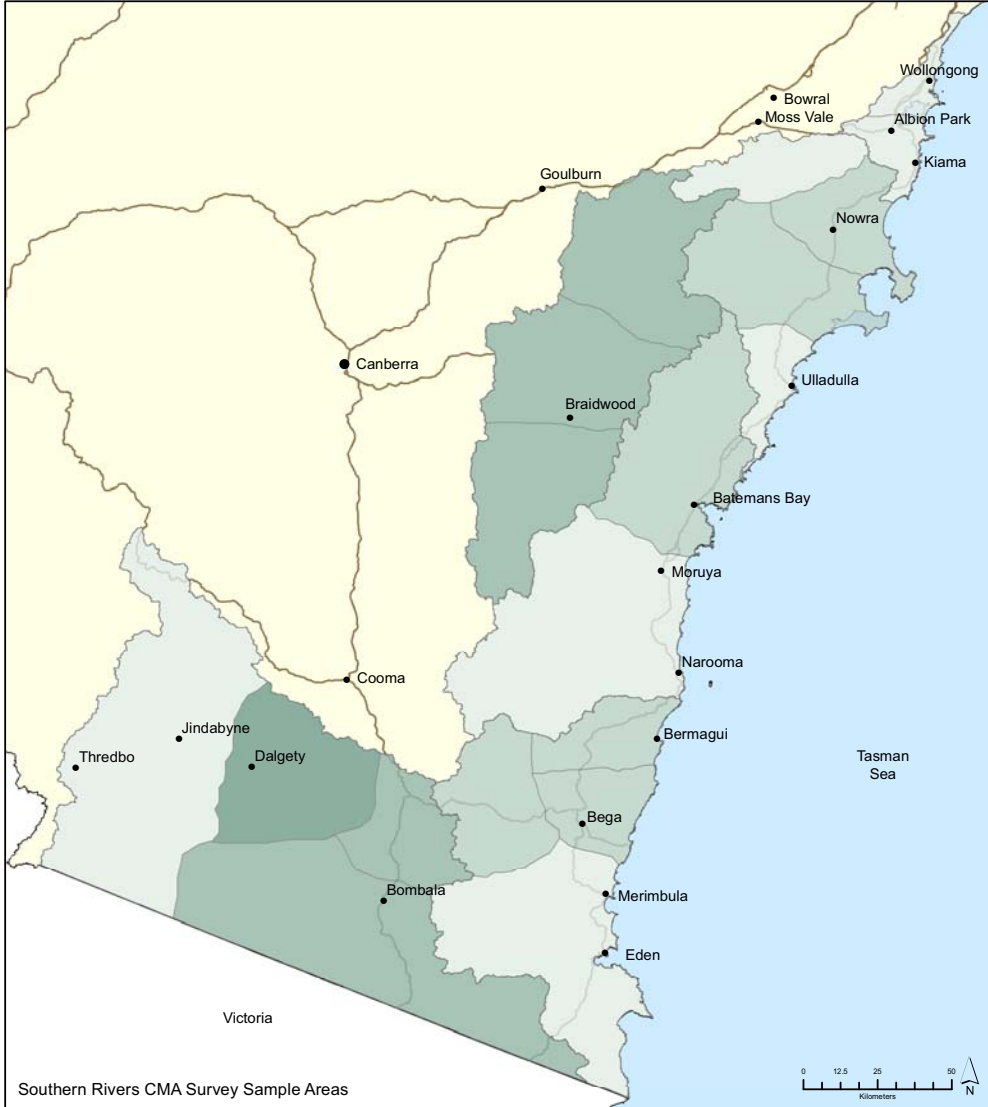
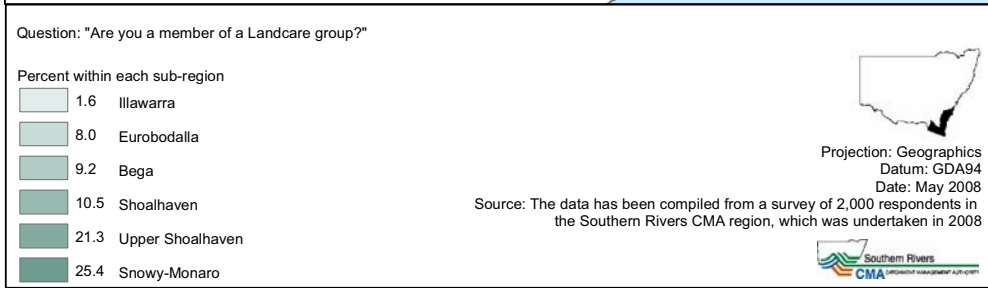
60. CAPACITY: CAPACITY TO INFLUENCE DECISIONS ABOUT IMPROVING LAND AND WATER



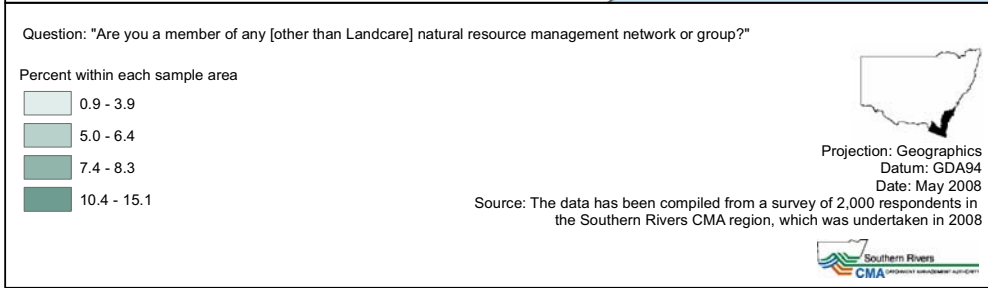
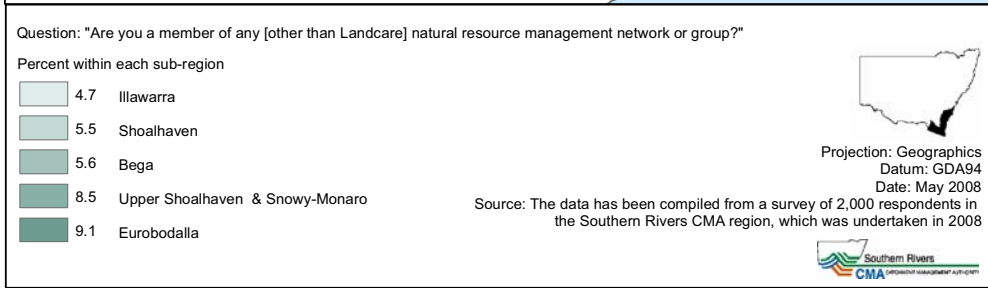
61. SOURCES OF INFORMATION ABOUT ENVIRONMENTAL ISSUES



62. LANDCARE MEMBERSHIP



63. MEMBER OF AN NRM GROUP OR NETWORK (OTHER THAN LANDCARE)



64. PERCENT REQUESTING SUPPORT TO IMPROVE THE HEALTH OF THEIR PROPERTY



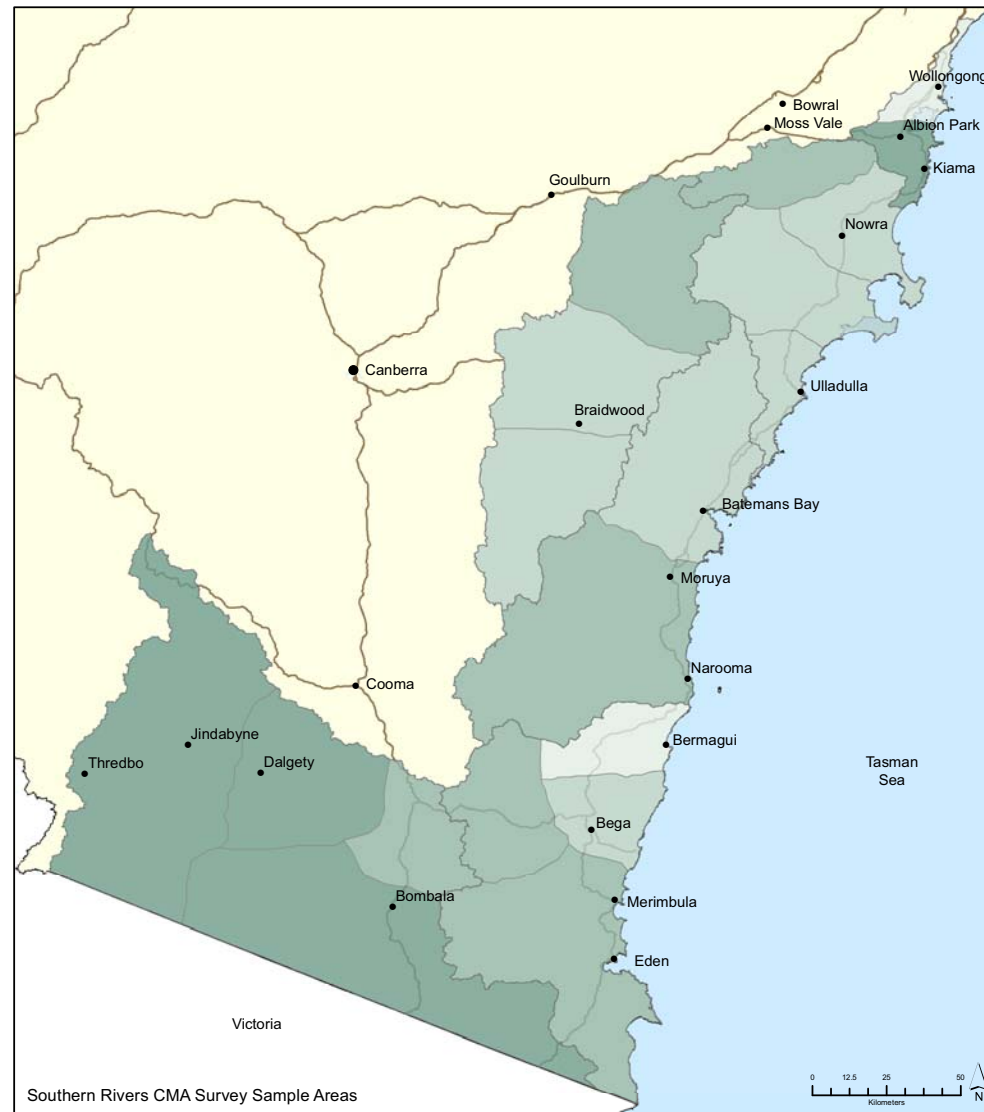
Question: "In the last two years have you requested any support or advice from any organisation or group about improving the health of land, vegetation or water on your property?"

Percent within each sub-region

9.4	Shoalhaven
10.5	Upper Shoalhaven
11.0	Illawarra & Bega
13.2	Eurobodalla
25.6	Snowy-Monaro

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



Question: "In the last two years have you requested any support or advice from any organisation or group about improving the health of land, vegetation or water on your property?"

Percent within each sample area

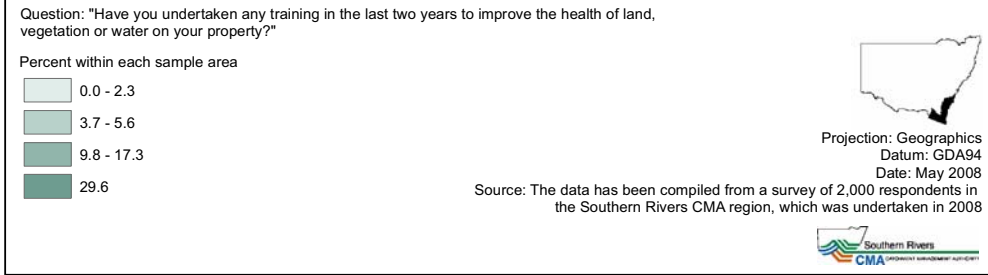
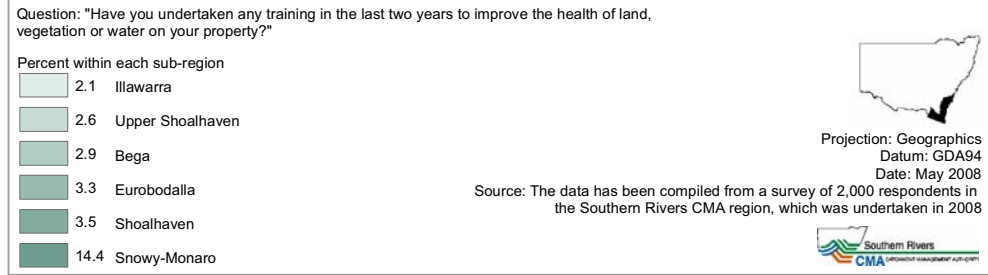
1.8 - 2.5
6.0 - 9.7
14.6 - 21.1
24.4 - 29.6

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



65. PERCENT UNDERTAKEN TRAINING TO IMPROVE THE HEALTH OF THEIR PROPERTY



66. AWARE OF THE SOUTHERN RIVERS CMA



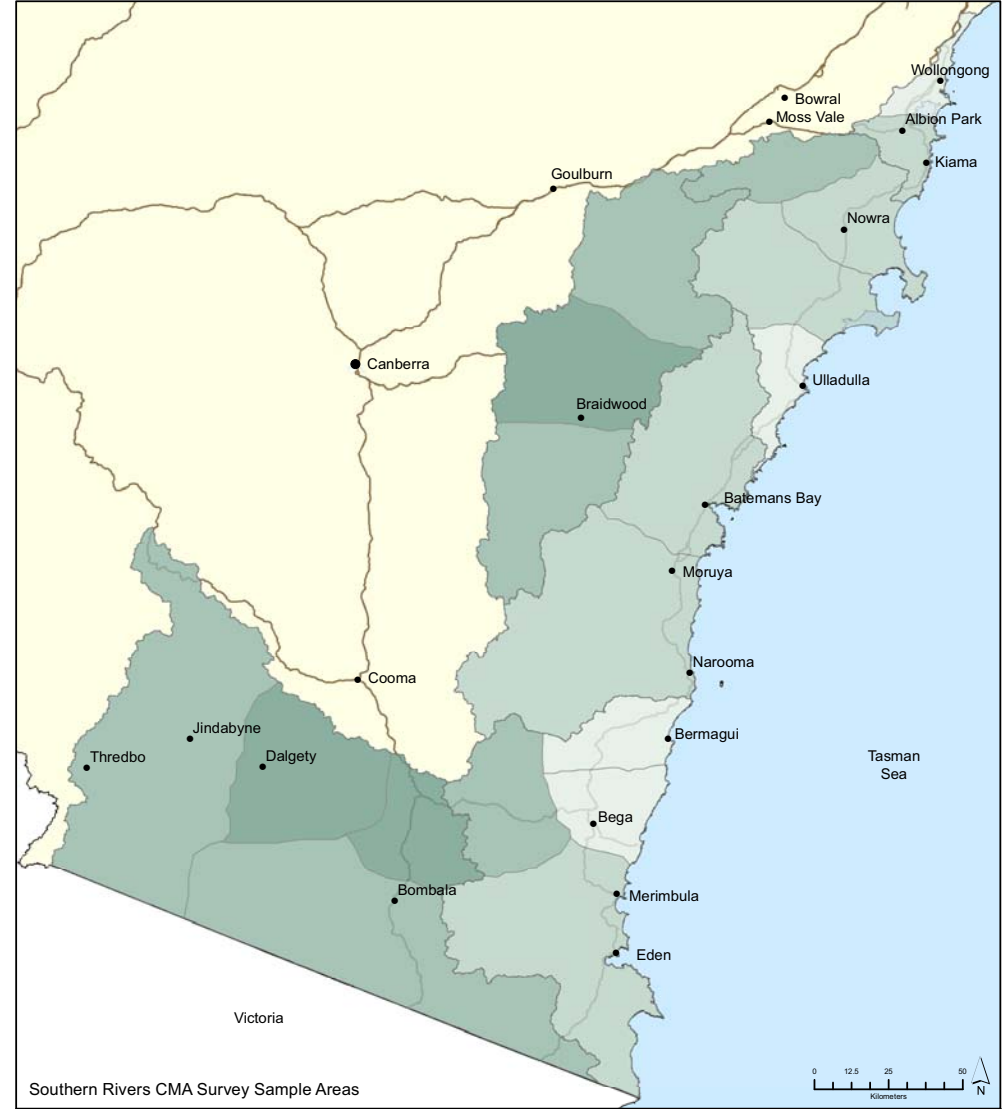
Question: "Have you heard of the Southern Rivers Catchment Management Authority or CMA?"

Percent within each sub-region

27.4	Illawarra
40.2	Bega
41.8	Shoalhaven
46.8	Eurobodalla
62.2	Snowy-Monaro
66.1	Upper Shoalhaven

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



Question: "Have you heard of the Southern Rivers Catchment Management Authority or CMA?"

Percent within each sample area

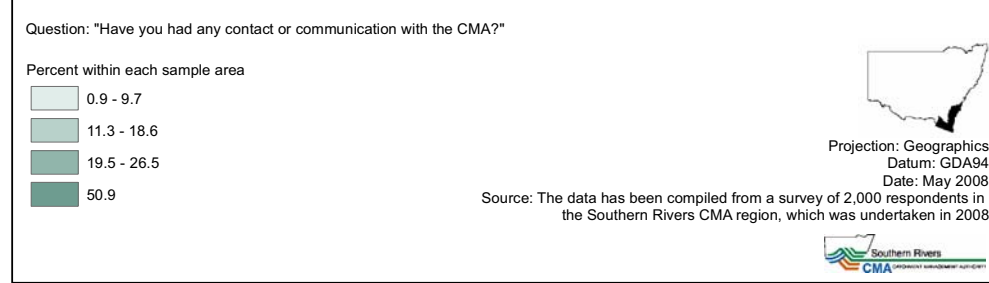
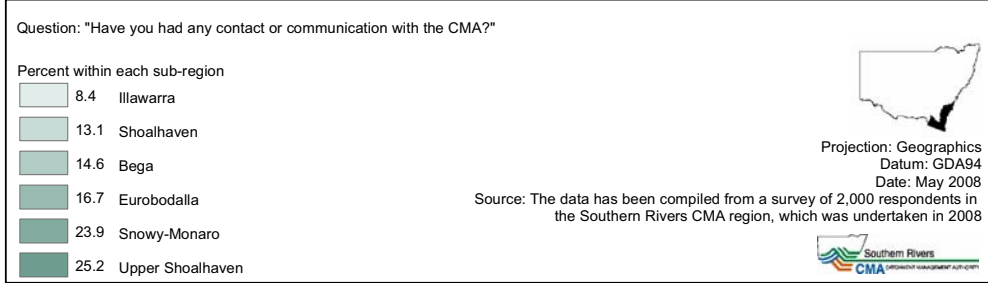
11.5 - 34.2
41.9 - 50.7
52.5 - 63.6
69.9 - 86.8

Projection: Geographics
Datum: GDA94
Date: May 2008

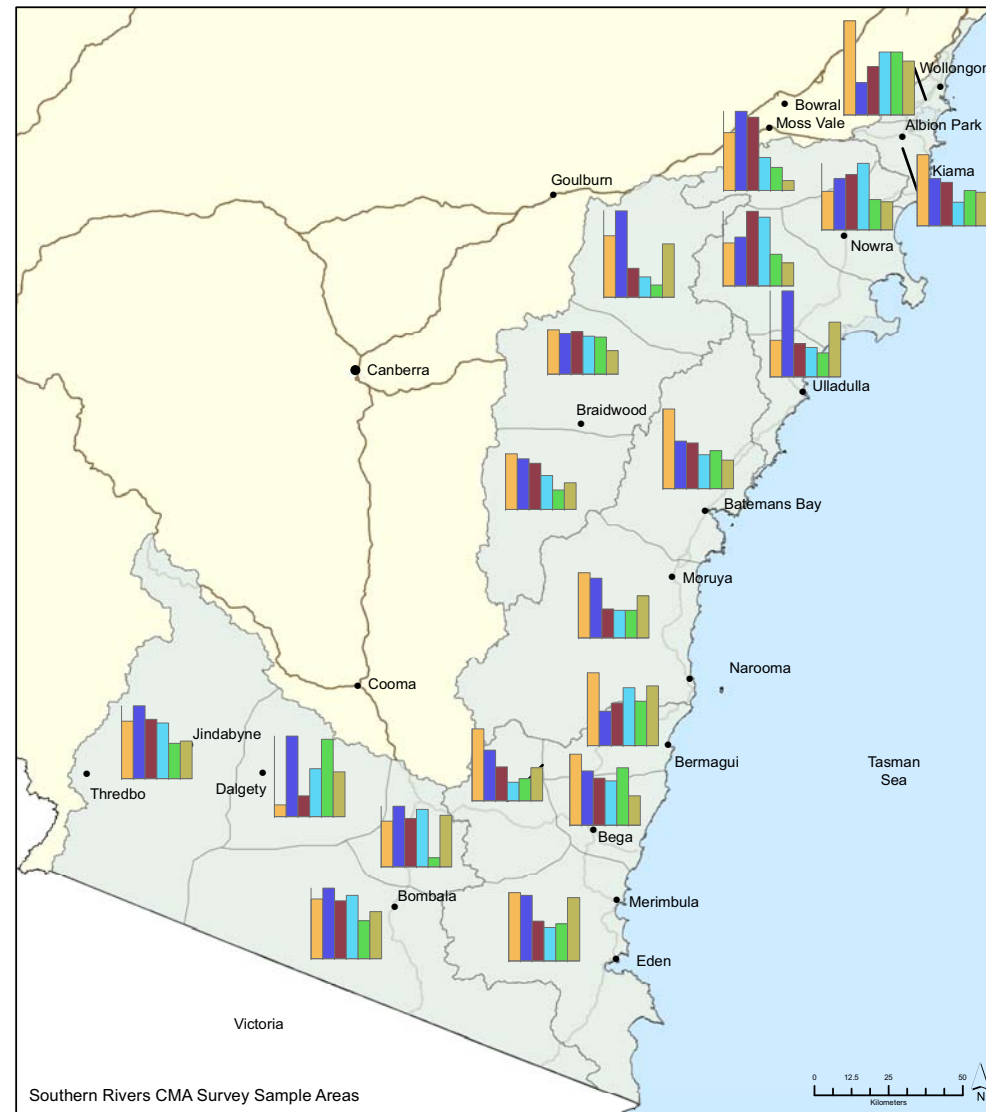
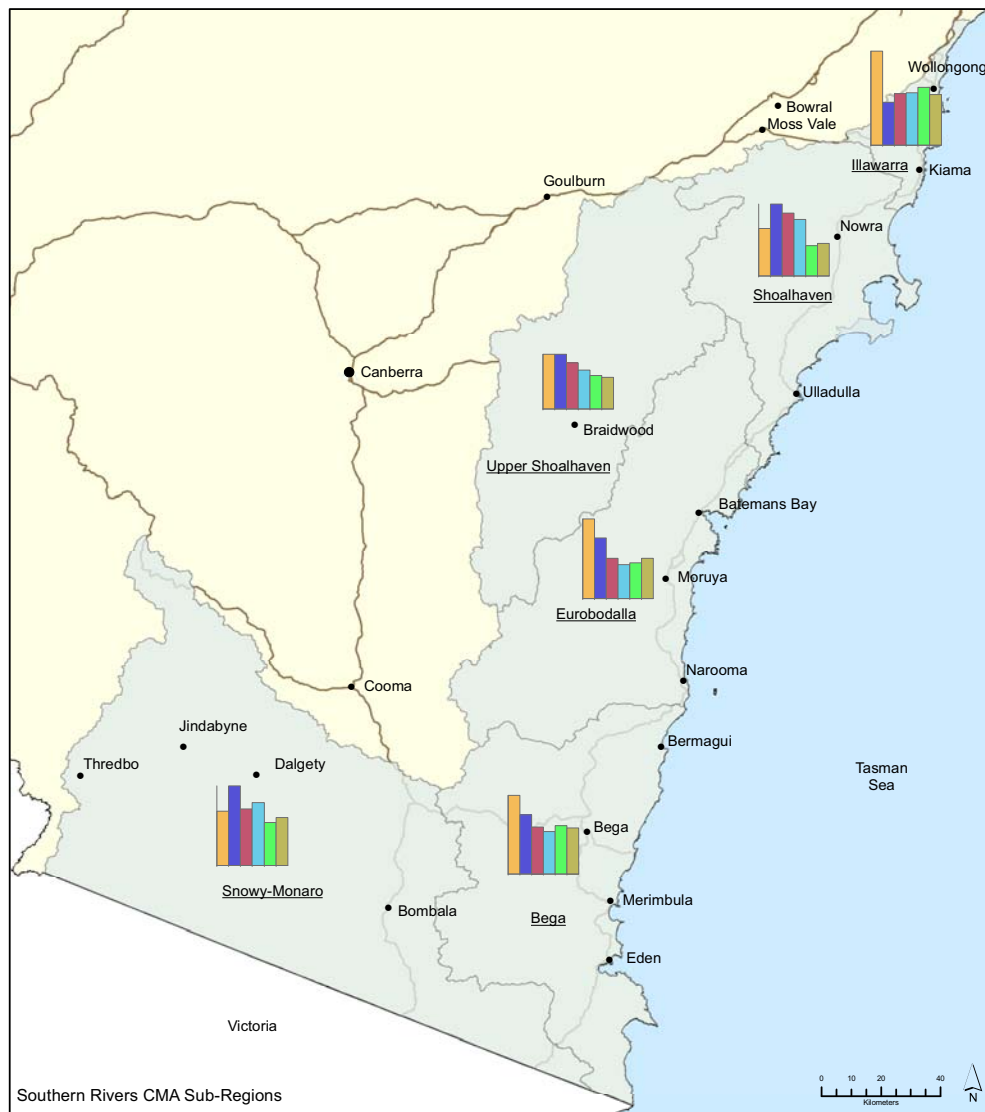
Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



67. CONTACT OR COMMUNICATION WITH THE CMA



68. PREFERRED METHODS FOR SOUTHERN RIVERS CMA COMMUNICATION



69. BELIEFS ABOUT THE RIGHT OF ABORIGINAL PEOPLE TO ACCESS PROPERTY



70. BELIEFS ABOUT THE USE OF TRADITIONAL ECOLOGICAL KNOWLEDGE



Question: "Aboriginal people possess traditional ecological knowledge which could benefit how we manage and look after land and water in the region (1) strongly disagree; (2) disagree; (3) tend to disagree; (4) tend to agree; (5) agree; (6) strongly agree

Mean score within each sub-region

3.57	Bega
3.66	Snowy-Monaro
3.68	Illawarra
3.73	Eurobodalla
3.78	Shoalhaven
3.83	Upper Shoalhaven

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



Question: "Aboriginal people possess traditional ecological knowledge which could benefit how we manage and look after land and water in the region (1) strongly disagree; (2) disagree; (3) tend to disagree; (4) tend to agree; (5) agree; (6) strongly agree

Mean score within each sample area

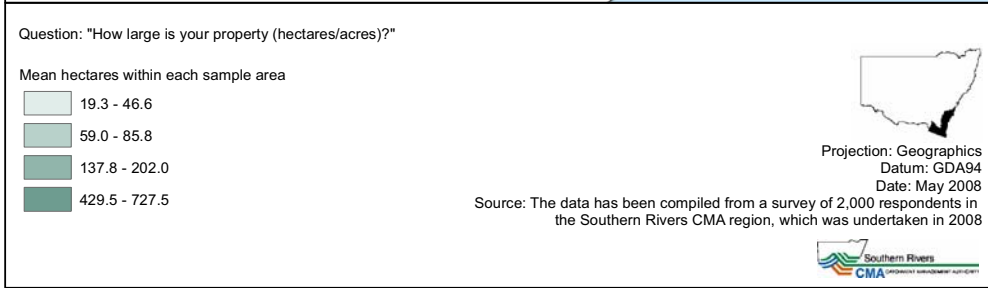
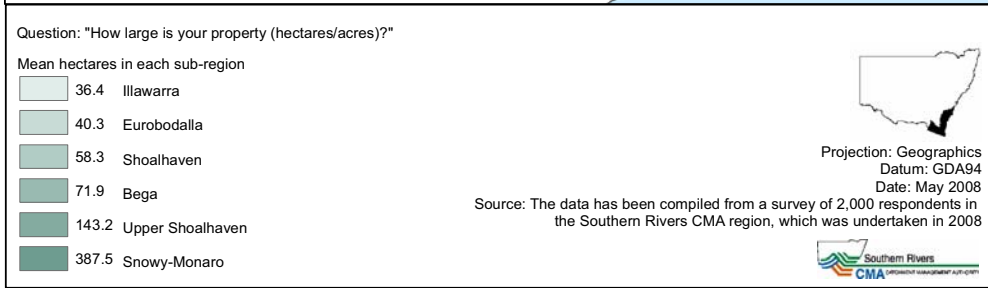
3.1
3.3 - 3.5
3.7 - 3.9
3.9 - 4.1

Projection: Geographics
Datum: GDA94
Date: May 2008

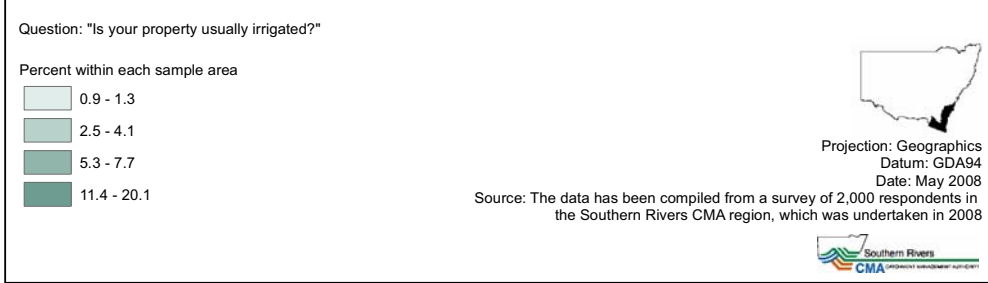
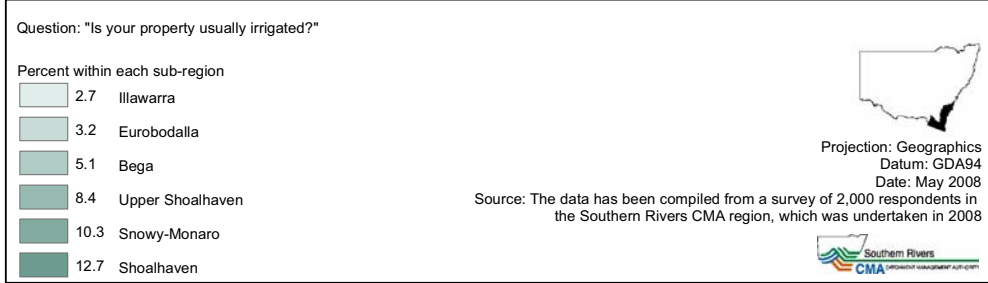
Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



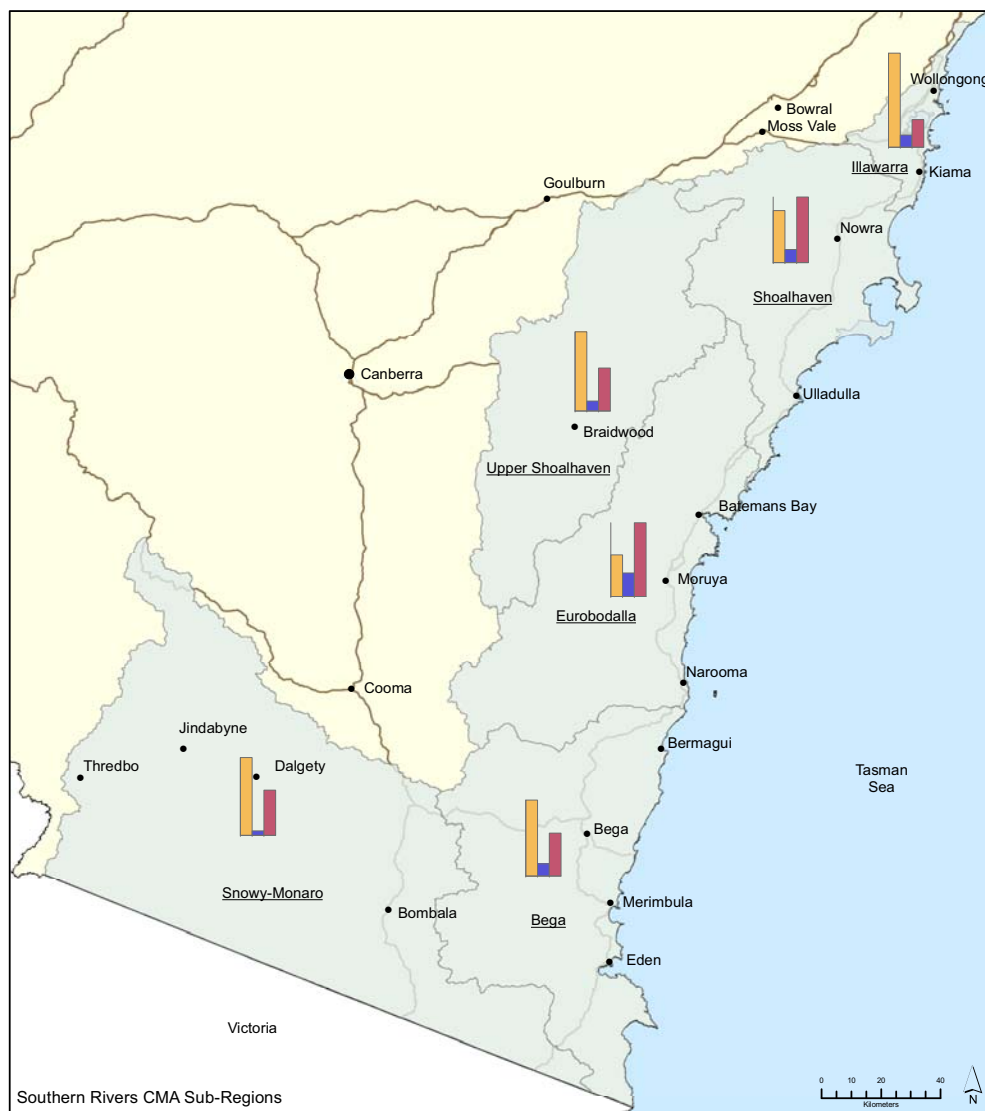
71. SIZE OF PROPERTY (Hectares)



72. IRRIGATED PROPERTIES



73. LAND USE PRODUCTION



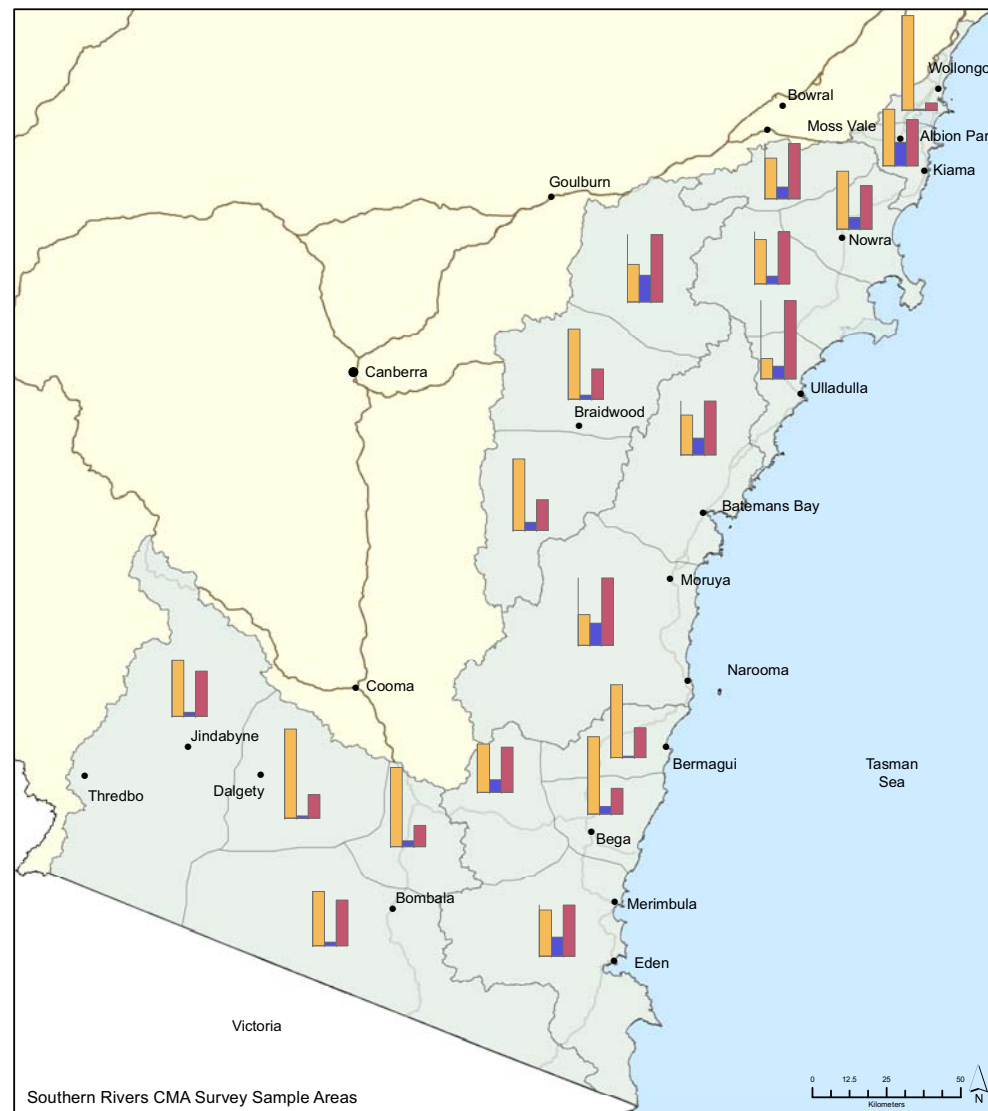
Question: "Would you say your property is primarily...."

Type of land use
(graphs reported as percentages)

- ...used for the production of crops, pastures or livestock
- ...used for conservation of native plants and animals
- ...a hobby or lifestyle farm

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



Question: "Would you say your property is primarily...."

Type of land use
(graphs reported as percentages)

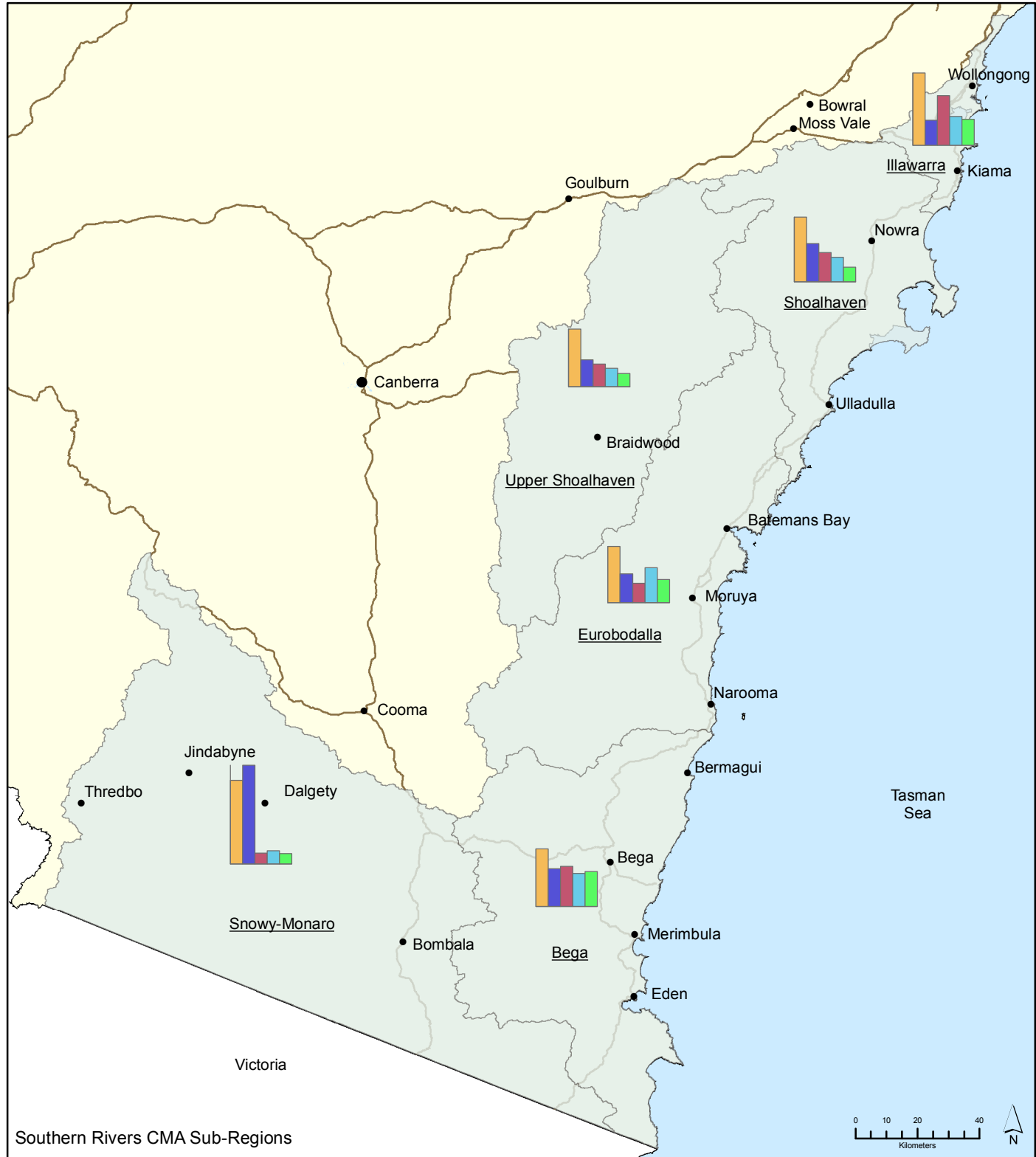
- ...used for the production of crops, pastures or livestock
- ...used for conservation of native plants and animals
- ...a hobby or lifestyle farm

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008



74. TYPE OF FARM PRODUCTION



Question: "What are the main things you produce on your property? "

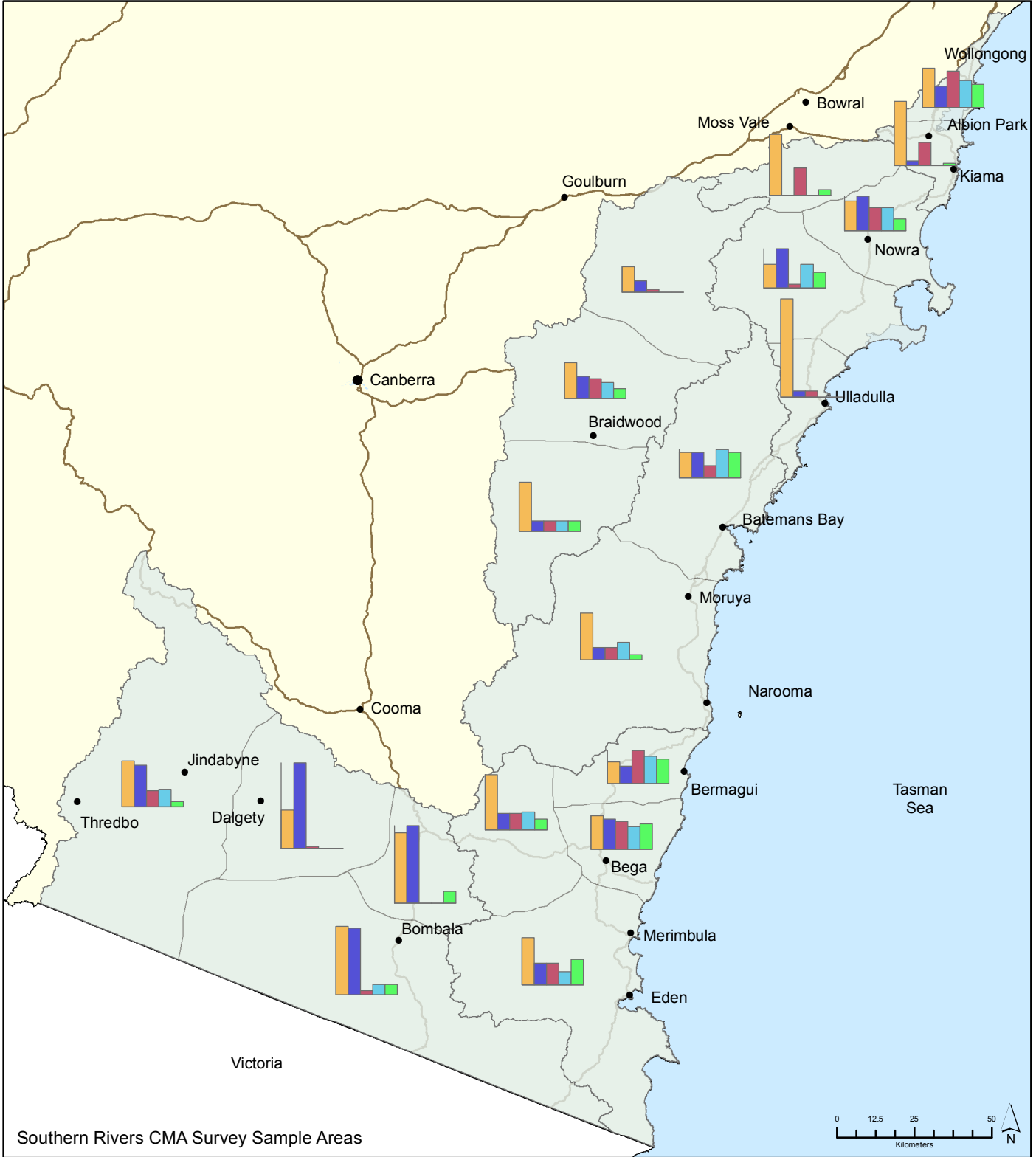
Type of production (top five)
(graphs reported as percentage of all producer farms)
(In some instances, such as the Upper Shoalhaven, 'dairy' refers primarily to goat dairies)

Beef cattle
Sheep
Dairy
Vegetables
Pastures for hay

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008

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Question: "What are the main things you produce on your property? "

Type of production (top five)
(graphs reported as percentage of all producer farms)
(In some instances, such as the Upper Shoalhaven, 'dairy' refers primarily to goat dairies)

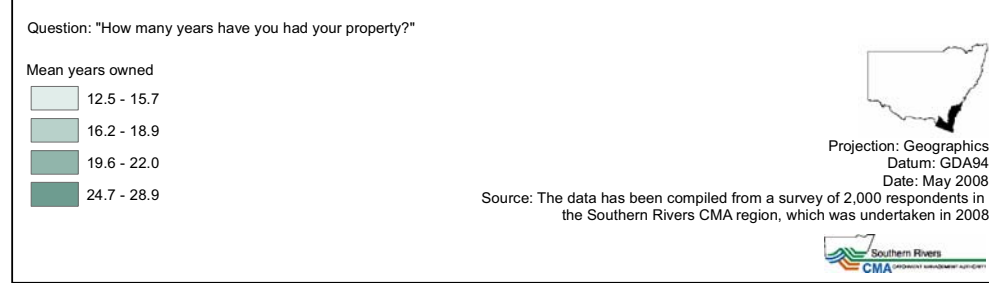
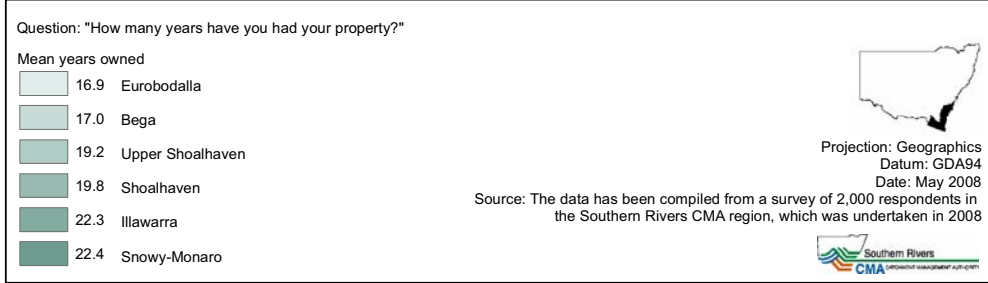
Beef cattle
Sheep
Dairy
Vegetables
Pastures for hay

Projection: Geographics
Datum: GDA94
Date: May 2008

Source: The data has been compiled from a survey of 2,000 respondents in the Southern Rivers CMA region, which was undertaken in 2008

Southern Rivers
CMA
CATCHMENT MANAGEMENT AUTHORITY

75. YEARS PROPERTY OWNED BY RESPONDENT



76. AGE OF RESPONDENT

