

A group of people are working in a garden, planting young plants into the soil. They are wearing various hats and casual clothing. The ground is covered with brown mulch and some red bricks are visible. The scene is outdoors with trees in the background.

COMMUNITY CAPACITY ASSESSMENT

A report on the 2017 survey

LIVING
LANDSCAPES



Executive Summary

Perth NRM's fourth Community Capacity in Natural Resource Management (NRM) survey was conducted in October 2017.

Over 110 environmental volunteers representing 68 groups and organisations involved in NRM participated in the survey. Interest in the survey has remained strong with 24 groups participating for the first time in 2017. Eight groups have contributed for four consecutive surveys and 65.2% groups have participated in more than one survey.

Qualitative and quantitative questions were asked about individual volunteers, their environmental group's assets and activities, and the strength of the partnership with their managing body. A Likert scale was used to analyse the qualitative data on motivation, capacity to undertake work and knowledge requirements. The 2017 survey responses have been compared to previous survey replies to build a longer-term picture of capacity for NRM. The most consistent results across the four consecutive years is the need for greater capacity in the areas of governance, engagement with Aboriginal groups and developing sustainable income sources.

Motivation for environmental volunteering was again primarily linked to the fulfilment of a desire to protect and preserve the environment. This enthusiasm was evidenced by over 51, 100 hours of on ground work undertaken by the survey participants in one calendar year. Together their in-kind contribution to environmental activities was worth an estimated \$1, 535, 400.

Successive surveys have shown environmental volunteers and their groups to be highly self-reliant; often contributing their own financial capital to ensure the group can conduct its activities. The most conspicuous personal assets include transportation of tools and equipment, office equipment and headquarters for administration.

A reduction in the number of capacity gaps of skills and knowledge of environmental volunteer groups was recorded in the 2017 survey. Twenty gaps were identified in the areas of human, financial and management capital compared to 31 areas in 2016. Asset management and governance continue to be identified as areas where environmental groups require additional support. Financial management, assessment of risk (including public liability insurance), record keeping and documentation of policies and procedures have consistently been identified as key areas for enhancement of competency.

In relation to human capital, greater knowledge and skills to undertake natural resource management in aquatic environments were sought by many survey participants. Management of indigenous and introduced species in marine, river and ocean environments, water quality monitoring, and the identification, removal of invasive species and restoration of aquatic ecosystems were identified as capacity gaps in 2017.

Environmental volunteers continue to work closely with their local government authority and the Department of Biodiversity, Conservation and Attractions to manage their natural areas, and 70.0% reported interaction between them was either effective or extremely effective. They valued the on-going support for operational collaboration, with 87.1% of respondents reporting that on-ground work is undertaken jointly with the managing body. However, making more funds available to deliver management of natural resources was seen by 60.8% of participants as the most effective way to improve the relationship between community groups and local government authorities.

Four consecutive annual surveys have shown environmental volunteers in the Swan Region make a significant contribution to the management of Perth's unique environmental values. Their desire to increase capacity across human, social, organisational and financial capital areas indicates that direct financial support, together with investment in training, will leverage volunteers' skills considerably to enable more effective management of the Region's natural resources.

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Background

The Community Capacity Assessment in NRM project was initiated in 2013. The first stage involved the development of a capitals' framework from published research about improved engagement of the community in the management of natural resources. The framework identified the key components of human, social, financial and organisational capitals likely to exist within environmental volunteering groups.

The second stage involved the development of a survey, in 2014, based on the framework, to enable environmental volunteers to self-assess their capacity for natural resource management.

Perth NRM has repeated the survey annually and reported on changes and trends in how environmental volunteers are performing across the capitals framework. In developing the framework and the survey instrument, considerable input was gratefully received from individual environmental volunteers, community groups and organisations and Perth NRM personnel.

The survey was produced using Survey Monkey and environmental volunteer groups were invited to participate, from Monday 25 September to Friday 10 November. Minor refinements in the 2017 survey were made including re-ordering some questions and their position within the five key sections. All respondents participated in Section 1 to 3, but only one nominated respondent from a group was asked to answer Section 4 and Section 5 to provide information on the organisational and financial capital of the environmental groups, in 2017.

- Section 1 – Background Information;
- Section 2 – About You;
- Section 3 – Your Group's NRM Activities;
- Section 4 - Group Capacity and Resources; and
- Section 5 – Partnerships.

Perth NRM sought to improve confidence in the information supplied about the management and governance of the volunteer groups by asking an executive member or nominated representative to answer the organisational and financial capital questions. Replication of data from groups and discrepancy within a group was eliminated by receiving a single response. Respondents were required to identify their position within the group

Section 1: Background Information

1. Position in the Group

Individuals with leadership and decision-making responsibilities were major participants of the community capacity assessment survey. When asked to identify their position within the environmental group, 65.5% of people reported that they fulfilled a formal executive committee duty or were a paid staff member. These roles encompassed positions like president, chair, treasurer, secretary, co-ordinator of the group or committee member.



2. Participating Environmental Groups

Participation in the Community Capacity Assessment survey increased in 2017, with 112 individuals from 68 different groups providing responses. This represents a 28.7% increase on 2016 levels of participation and is the highest level since the survey was first initiated in 2014. Eight groups have now taken part in the survey for four consecutive years and 55.0% participated previously.

Participating Organisations

Armadale Settlers Common	Friends of Lightning Swamp Bushland#	Moore Catchment Council#
Baigup Wetland Interest Group***	Friends of Lloyd Hughes Park**	Mt Henry Peninsula Conservation Group^^
Bannister Creek Catchment Group#	Friends of Mary Carroll Wetland***	Mullaloo Beach Community Group Inc.***
Bardon Park Friends Group	Friends of Moore River Estuary#	Murdoch University Environmental Students' Association (MUEnSA)
Bardon Park Riverside Restoration Group#	Friends of Mosman Park Bushland	Native ARC
Bassendean Preservation Group	Friends of Nyaania Creek Glen Forrest^^	North Fremantle Community Association
Bicton Environmental Action Group	Friends of Paganoni Swamp***	Peel Preservation Group
Bungendore Park Environmental Group**	Friends of Piesse Brook***	Penguin Island
Cambridge Coastcare***	Friends of Pioneer Park***	Quinns Rocks Environmental Group*
Canning River Regional Park Volunteers#	Friends of Point Peron#	River Guardians
Conservation Volunteers Australia	Friends of Queens Park Bushland***	Riverside Gardens
Cottesloe Coastcare Association**	Friends of Ray Owen Reserve#	Roleybushcare Inc.*
Friends of Blue Wren Reserve^^	Friends of The Spectacles#	SERCUL
Friends of Bull Creek Catchment#	Friends of Woodlupine Brook, Magnolia Way and Juniper Way Reserves	Shenton Bushland
Friends of Cantonment Hill	Friends of Yellagonga Regional Park Inc.*	Stirling Natural Environment Coastcare Inc^
Friends of Claughton Reserve#	Gingin Water Group Inc	Swan Estuary Reserves Action Group (SERAG) Inc^^
Friends of Harman Park	Goss Avenue Bushland Group	Swan View Primary School^^
Friends of Hepburn & Pinnaroo Bushland Inc**	Harvest Lakes Residents Assoc. Inc.	Urban Bushland Council
Friends of Inglewood Triangle	Lake Clifton-Herron Landcare Group	Victoria Park Urban Tree Network
Friends of John Forrest National Park#	Litter Ladies on Kayaks	Wadjup Gabbilju
Friends of Jorgensen Park#	Living Smart	West Leederville Community Garden
Friends of Lake Claremont*	Lower Helena Group	Yanchep National Park Volunteer Association#
Friends of Lake Gwelup#	Mandurah Volunteer Dolphin Rescue Group	

Table 1 List of participating organisations or community groups.

Key: Previous Years: ***=2016; **2016,2015; *2015, 2014; #2016; ^^2015; ^2014



3. Extent of Additional Volunteering by Participants

Survey participants were asked to identify additional groups or associations for which they undertook volunteering in 2017. An additional 36 volunteer groups were identified by the respondents, bringing the total number of organisations supported by the participants to 105, compared to 97 in 2016.

Organisations that help to coordinate activities or advocate for natural areas like the Urban Bushland Council, Environment House, Birdlife WA, Canning River Residents Environment Protection Association Inc. and Coastcare groups were identified by several participants.

Additional Volunteering Groups Identified	
Australian Wildlife Conservancy	Guilderton Community Assoc. Landcare
BirdLife Australia	Joondalup Community Coast Care Forum
City of Canning	Kanyana Wildlife Rehabilitation Centre
Claisebrook Catchment Group	Keep Australia Beautiful
City of South Perth Environment Assoc. (CoSPEA)	Kids Nature Club
Canning River Residents Environment Protection Assoc. Inc (CRREPA)	Mandurah Herbarium
Environment House	Mandurah Heritage and Environment Group
Environmental Centre Management Committee	Men of the Trees
Estuary Guardians	Mt Henry Peninsula Conservation Group
Friends of Harold St Reserve	National Malleefowl Recovery Team
Friends of Craigie Bushland Inc	Rottnest Island Nursery Group
Friends of Glen Forrest Superblock	South Padbury Primary School
Friends of Ken Hurst Park	Sustainability First
Friends of Ledger Reserve	Tangaroa Blue Foundation,
Friends of Maritana Bush	The Bushcare and Environmental Working Group
Friends of Maylands Lakes	WA Insect Study Society
Friends of North Ocean Reef Iluka	Wilderness Society
Friends of Toornaart Creek	Wilson Wetland Action Group

Table 2: Additional organisations supported by the participating environmental volunteers.

4. Location of Environmental Work

Environmental volunteers are active across 30 of the 32 local government authorities (LGAs) in the Swan Region. At least one group participated from 94% of the Region's LGAs with only the regional localities of Shire of Northam and Shire of Wandering not represented. Three groups from the City of Mandurah (Peel Harvey Catchment Council) also participated in the survey. Whether located in urban or peri-urban areas, the volunteers work to conserve a wide range of environments, as indicated by the map showing activity of community groups across the Swan Region (Figure 2).

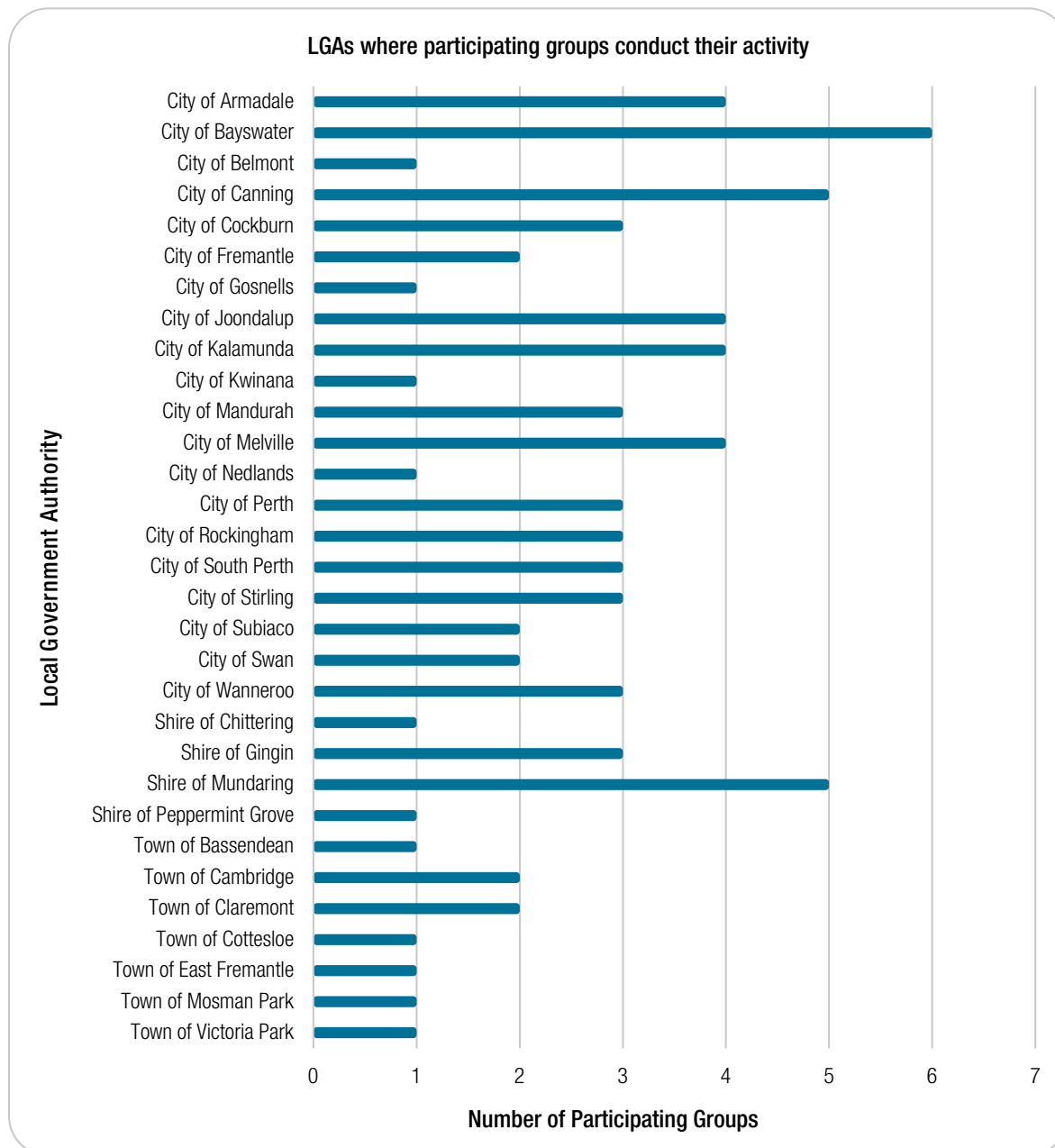


Figure 1: Local Government Authorities (LGA) where participating volunteers reported the main group they are associated with is located (n= 113)

5. Longitude and Latitude

Seventy six (67.7%) of the 112 respondents provided precise longitude and latitude information for the main location where they volunteer their time. The results indicated a moderate level of skill in the use of on-line mapping applications, and provision of the data enabled Perth NRM to accurately map the geographic distribution of the community groups who participated in the survey (Figure 2).

There are a variety of applications and programs that can assist volunteers to map requirements for their projects. Perth can assist volunteers to find the mapping application that best suits their natural resource management needs.

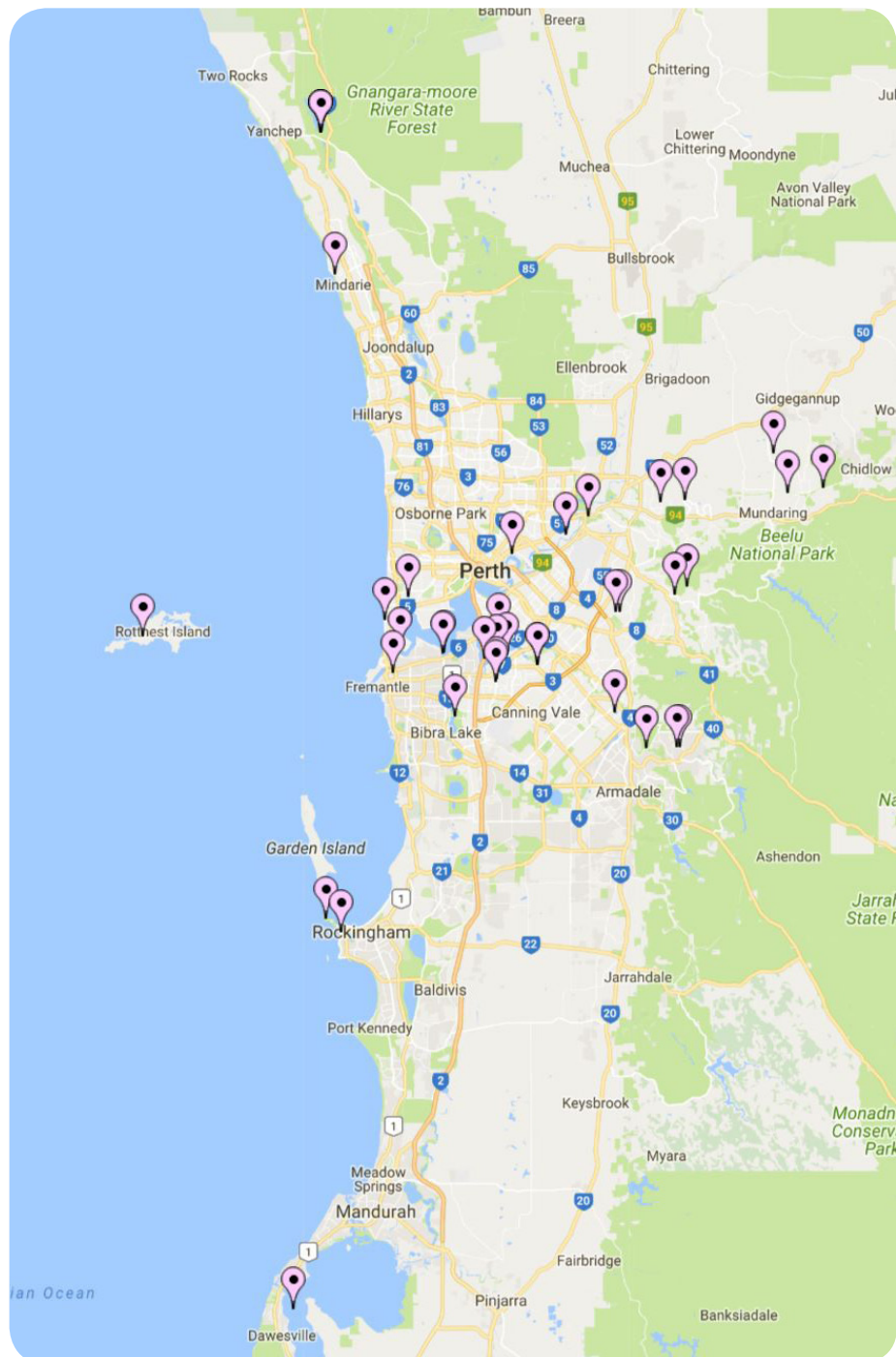


Figure 2: Geographic area of activity in the Swan Region for community groups.

6. Area Covered

Environmental volunteers in the Swan Region manage a wide range of natural areas. The smallest natural area was 1 ha in size, while one respondent indicated that their group is involved in the care of over 2,600 ha. A few groups are responsible for long linear strips along the coast or river foreshore and maintain narrow sections of natural vegetation.

7. Environmental Volunteers in Regional Parks and DBCA Reserves

In 2017, 44 people reported that they volunteered formally or informally in 26 different nature reserves, regional parks and national parks managed by the Department of Biodiversity, Conservation and Attractions (DBCA). Once again, many respondents that work on DBCA managed land reported that they volunteered at Yanchep National Park (23.9%).

Regional Parks and DBCA Reserves		
Alfred Cove A-Class Nature Reserve	Marmion Marine Park	Swan Estuary Marine Park
Beeliar Regional Park	Matilda Bay Reserve	The Spectacles
Canning River Regional Park	Milyu A-Class Nature Reserve	Whiteman Park*
Darling Range Regional Park	Mooytooyt Nature Reserve	Woodman Point Regional Park
Herdsmen Lake Regional Park	Peel Harvey Waterways and Rivers	Wungong Regional Park
Jandakot Regional Park	Pelican Point Marine Reserve	Yalgporup National Park
John Forrest National Park	Pinjarra Nature Reserve	Yanchep National Park
Kalamunda National Park	Rockingham Lakes Regional Park	Yellagonga Regional Park
Kooljerrinup Nature Reserve	Shoalwater Islands Marine Park	

*Whiteman Park is managed by the Department of Planning, Lands and Heritage but some volunteer activities are supported by DBCA and Swan ALOCA Landcare Program (SALP)

Table 3: Environmental volunteer group conduct activities at nature reserves and regional parks managed by the Department of Biodiversity, Conservation and Attractions

8. Knowledge of The Swan Region Strategy for NRM

Recognition of the Swan Region Strategy is good with 67.7% of people having heard of it, visited the website or used the document to direct their NRM activities. This is a significant increase (46.2%) on the number of participants who were aware of the Strategy in 2016.

Perth NRM is continuing to engage with environmental organisations to increase awareness of the Strategy and identify ways that it might be better implemented across the Swan Region.

Have you heard about the Swan Region Strategy for NRM?	Survey results	
	2017	2016
Yes, and I have used it to direct my NRM activities	5.3% (6)	1.1% (1)
Yes, I know about it but have not yet used it	35.4% (40)	39.1% (34)
Yes, I have visited the website	26.6% (30)	19.5% (17)
No	32.7% (37)	40.2% (35)

Table 4: Number of people aware of the Swan Region Strategy for NRM.

Section 2: About You

9. Gender

In 2017, the ratio of women to men was nearly 2:1 which is higher than the past three surveys. As in previous years more women 68 (66.0%) than men 35 (34.0%) responded (n=103) to the gender survey question.

10. Age Range

The 60 plus age bracket is an important volunteer cohort and has made up over 50.0% of respondents in each of the past three surveys. In 2017, this trend continued with 62.0% of participating respondents indicating that they were over 60 years old (n=103).

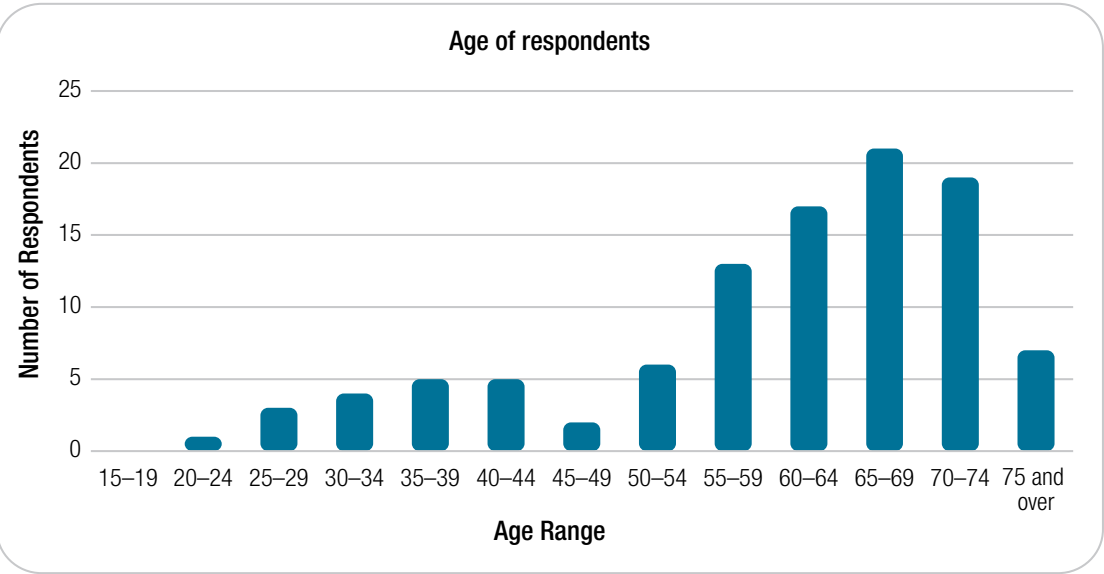


Figure 3: Age of the participating environmental volunteers



11. Environmental Volunteering and Attachment to a Local Natural Area

Attachment to natural areas close to home was again the predominant reason for people to become an environmental volunteer. In 2017, 77.7% of people indicated that proximity influenced them greatly. A trend is now apparent, and the four surveys indicate that attachment to local environments is a key factor.

A consistent group of individuals continue to be motivated by different factors. In all four surveys a small number of people replied that attachment to place was not a motivation for them to become an environmental volunteer.

Motivation by attachment to place	Survey results			
	2017	2016	2015	2014
To a great extent	77.7% (80)	61.8% (47)	50.0% (27)	69.9% (86)
Slightly	12.6% (13)	26.3% (20)	38.9% (21)	22.0% (27)
Very little	5.8% (6)	1.0%(1)	3.7%(2)	3.3%(4)
Not at all	3.9% (4)	10.5% (8)	7.4% (4)	4.9% (6)

Table 5: Motivation by attachment to place, by percentage and number of respondents, comparison of 2017, 2016, 2015 and 2014 survey results.

12. Desire to Conserve the Environment, Distance from Home

There is a strong relationship between location and the distance that people are willing to travel to undertake conservation works. As in previous years, over one third of respondents (43.7%) indicated that they are willing to travel up to 10 km from their home to conserve the environment.

Again in 2017, some environmental volunteers answered (11.6%) that they willingly travel anywhere in Western Australia or to other national or international destinations in their desire to conserve the environment.

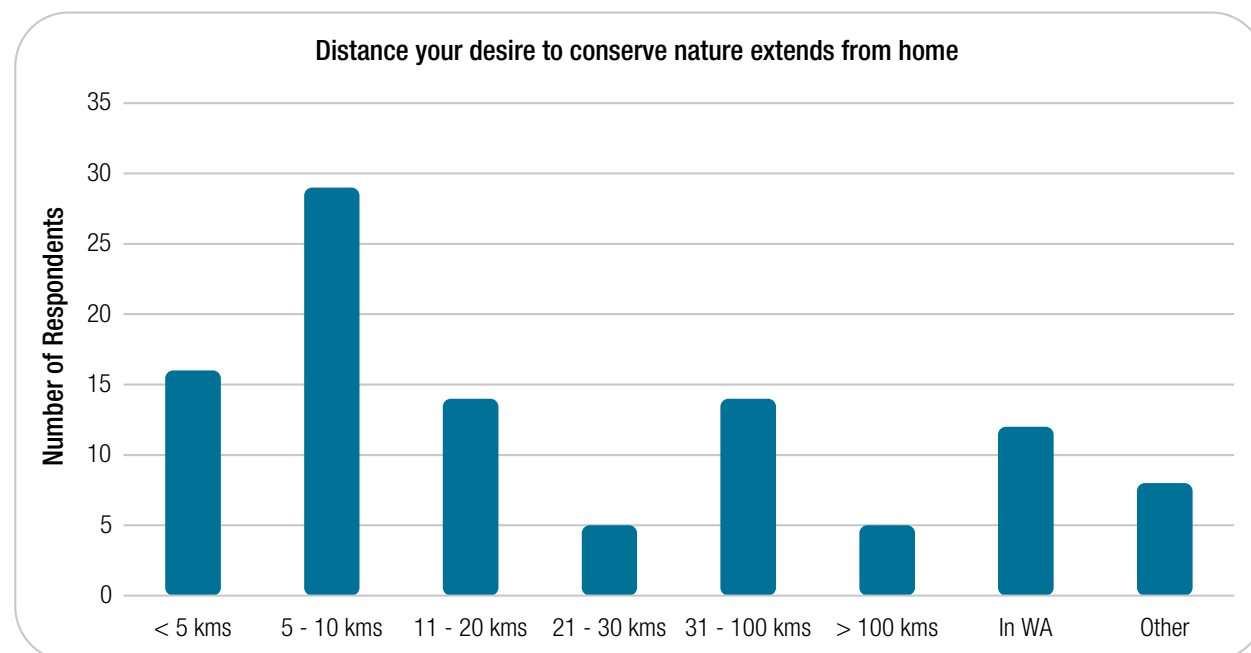


Figure 4: Distance volunteers are prepared to travel to conserve the natural environment.

13. Motivation to Volunteer

The 2017 responses on the motivation to volunteer mirror the 2016 and 2015 report. Once again participants reported that the desire to protect and preserve the environment motivated them to a great extent (90.2%). Leaving a legacy for future generations was again the second most common motivator (79.2%).

Friendship and the chance to be part of something, encouraged people somewhat. The motivators relating to self-worth, purpose and competence were also reported to be somewhat important to the volunteers who participated, but once again building NRM experience for future career opportunities was deemed to have none or very little importance to them. This response may be related to the demographics of the participants, with most being over 60 years of age.

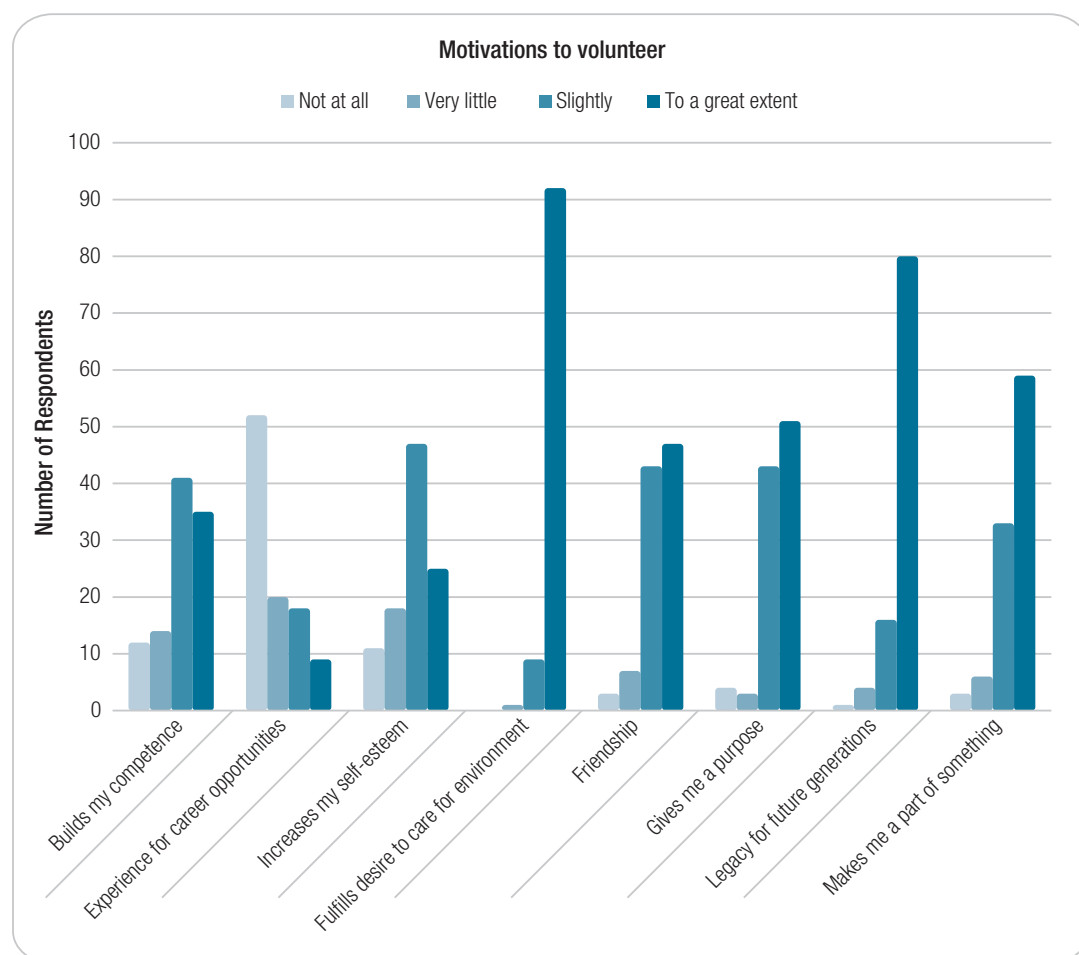


Figure 5: Responses to statements and to what extent they motivate NRM volunteering in individuals.



14. On Ground Hours Volunteered

A total of 51,180 hours of on-ground work was undertaken by the survey participants over one calendar year. Together their on-site environmental activities were worth an estimated \$1,535,400 (calculated at \$30/hr). On average, the environmental volunteers each contribute almost 500 hours per annum to the protection and conservation of the Swan Region's natural heritage.

Most time was spent on the identification and removal of weeds (6,828 hrs) and the revegetation of sites (6,468 hrs), as in the three previous surveys. Another four activities recorded between 4,000 and 5000 hours. They indicated that site monitoring, the supervision of volunteers or contractors and rubbish removal remained important management activities from 2014 to the present. Interestingly, although the number of hours attributed to identification of native flora and fauna have remained steady for the past four years, in 2017 it was not in the top six activities as Community Education was identified as a major activity, with 4212 hours attributed to the task.

A significant amount of volunteer time (19,500 hrs) was spent addressing threats to the natural values of the managed areas. Over 15,700 hours was attributed to the identification and removal of pest animal and plant species and a further 816 hours was attributed to the mapping of weeds.

The types of activities undertaken by volunteers are highly varied and many expressed great satisfaction, in the work they do, especially in relation to the monitoring of native fauna, and wildlife rescue.

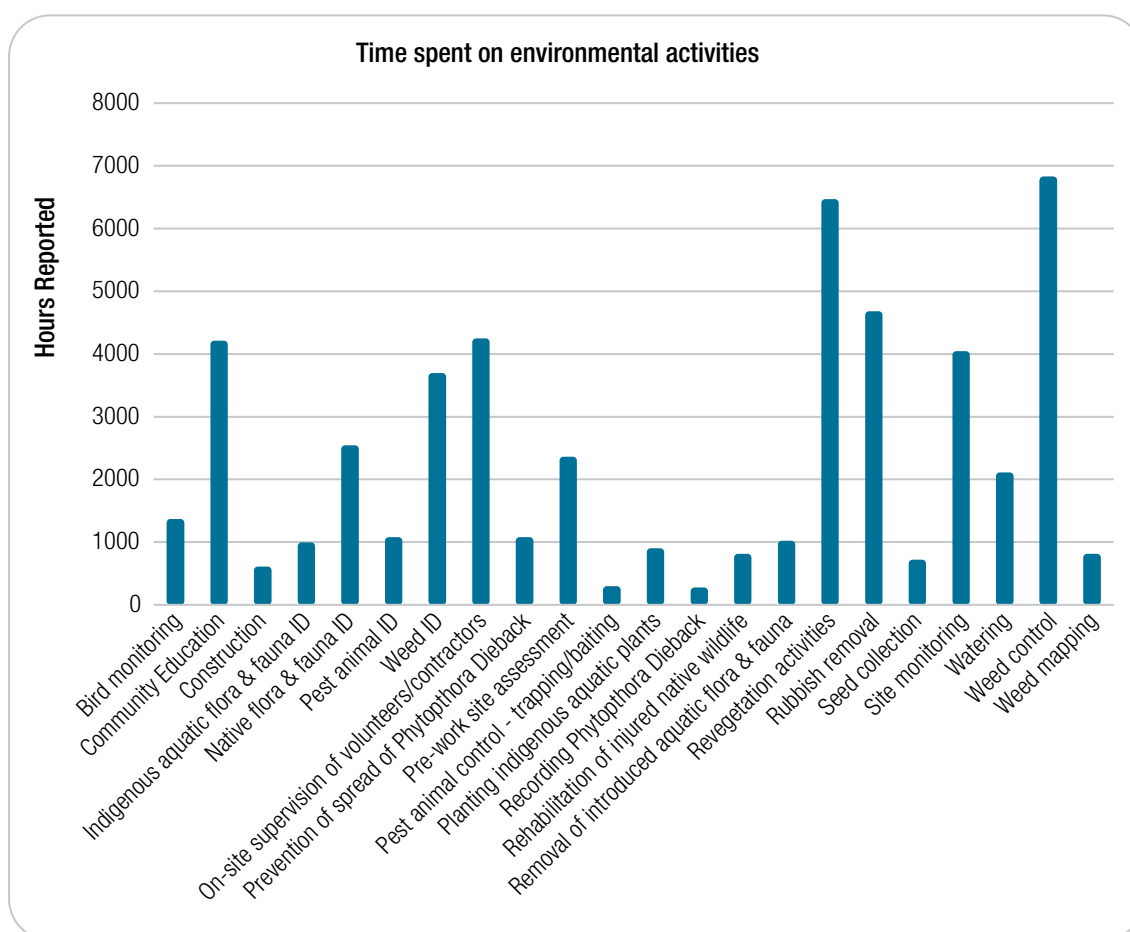


Figure 6: Number of volunteer hours spent on various NRM activities.

15. Support Hours Volunteered

A total of 38,208 hours was spent on actions to sustain on-ground volunteering, at an estimated value of \$ 1,146, 240. This is a ratio of approximately 1:3 for on-ground work to support activities, and highlights the time undertaken by volunteers on organisational tasks. The ratio indicates that more time was spent on supporting on-ground work in 2017 and suggests an over 30% decrease in efficiency for the support of on-ground work.

Administration (7,020 hrs) was the most highly reported support activity and recorded a three-fold increase to previous years. Advocating on behalf of the group (4,044 hrs), planning and project management (4,128 hrs) and records/information management (4,116) were the next most common executive functions, with event planning and management (3,396) again requiring a significant amount of time. When combined these four activities contributed to 40 % of the support tasks. There is a strong pattern between the top five activities, with 2017 results replicating those of the previous three surveys.

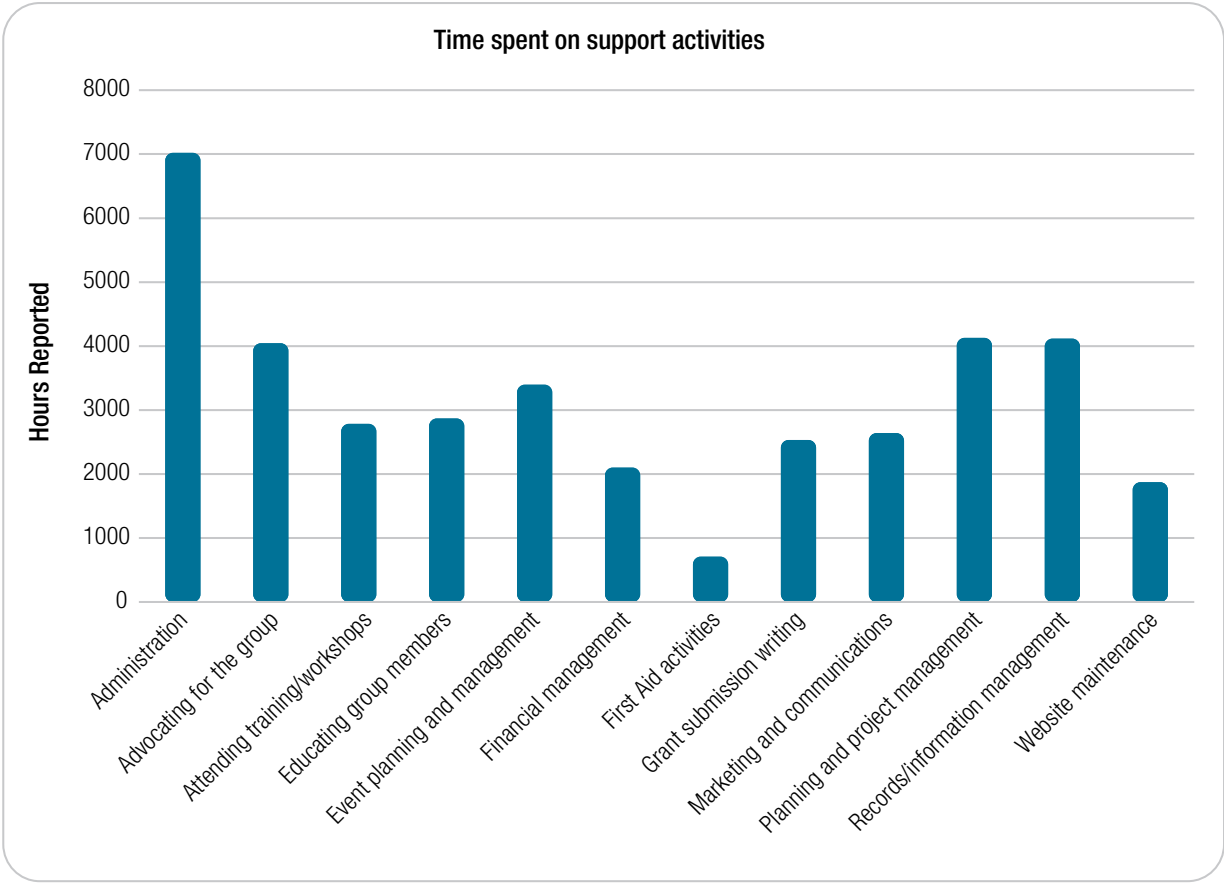


Figure 7: Number of volunteer hours spent on support activities.

Section 3: Your Group's NRM Activities

16. Groups Attitudes to NRM

Overwhelmingly, the mean response (4.3) showed respondents agreed with the statement that fellow group members believe in the cause of natural resource management. The result in 2017, is similar to the mean score for this statement in both of the preceding years.

Agreement on what the priorities are and on how they should be conducted was lower than the overall belief in the importance of natural resource management, as in previous surveys. There has been an increase in the mean scores in consecutive years to these two statements.

To this question respondents had a 5 point Likert Scale where Strongly Disagree= 1, Disagree= 2, Neutral = 3, Agree = 4 and Strongly Agree= 5. The mean (or average) of all responses was then determined from this scale.

Statement of group attitudes to nrm	Mean score			
	2017	2016	2015	2014
All the members of my group believe in the cause of natural resource management	4.3	4.4	4.2	3.8
All members of my group agree on NRM priorities for the area	3.9	3.7	3.6	3.2
All the members of my group agree on how NRM activities should be carried out	3.7	3.5	3.6	3.0

Table 3: Comparison of the 2017, 2016, 2015 and 2014 mean scores of group attitudes to NRM.

17. Extent of Human Capital: On- Ground Skills

Environmental volunteers continued to exhibit the greatest on-ground skills (≥ 3.5) in the areas of:

- weed identification and suitable methods for their removal (4.0, +0.1);
- revegetation activities (4.3, +0.4);
- pre-work site assessment (3.5, -0.1);
- identification of indigenous terrestrial flora and fauna (3.9, +0.3);
- onsite supervision (3.7, +0.1); and
- site monitoring (3.6, +0.1).

These areas continue to remain the strongest, and the mean score of each of these five skills increased from 2016. Importantly, all skills and knowledge areas now have a mean score ≥ 2.5 , indicating that the capacity of individuals and groups to manage natural resources is increasing.

In 2016, two on-ground skills were identified as areas in which environmental groups needed to improve their capacity (≤ 2.5). In 2017, improvements were recorded for each of these:

- release methods for native fauna back in to the wild (2.9, +0.5)
- rehabilitation of injured native wildlife (2.7, +0.2).

The table below shows the mean scores against on-ground skills and knowledge for the 2017, 2016, 2015 and 2014 surveys.

Human capacity on-ground skills and knowledge	Mean scores			
	2017	2016	2015	2014
Identification of factors likely to impact negatively on a body of water or a system	3.7	3.1	3.6	2.9
Identification of indigenous aquatic flora and fauna	3.0	2.8	2.6	3.4
Identification of indigenous terrestrial flora and fauna	3.9	3.6	3.9	3.2
Identification of introduced species of aquatic flora and fauna	3.2	2.8	2.6	3.4
Identification of Phytophthora Dieback	3.2	2.9	2.8	3.1
Identification of terrestrial pest animals	3.8	3.4	3.6	3.2
Methods for preventing or limiting spread of dieback	3.4	3.2	3.1	2.9
Methods for releasing native fauna back in to the wild	2.9	2.4	2.3	NA
Methods for removing introduced species of aquatic flora and fauna	2.8	2.7	2.3	2.9
Monitoring ecological change	3.3	3.0	NA	NA
On-site supervision of volunteers/contractors	3.7	3.6	3.7	3.1
Pre-work site assessment	3.5	3.6	3.8	3.0
Rehabilitation of injured native wildlife	2.7	2.5	2.3	NA
Revegetation activities – e.g. plant selection/planting	4.3	3.9	4.1	3.4
Scientific water quality monitoring	2.8	2.7	2.6	2.5
Seed Collection	3.4	3.3	3.5	2.8
Selection of indigenous plants and where to plant them	2.9	2.7	2.5	3.5
Site monitoring	3.6	3.5	3.9	3.2
Soil monitoring	2.7	2.8	2.4	NA
Terrestrial pest animal control – trapping/baiting	2.5	2.5	2.4	2.2
Use of information and mapping technologies	3.1	3.1	3.4	2.8
Weed identification and suitable methods for their removal	4.0	3.9	4.1	3.4

Table 4: Human on-ground capital comparison of 2017, 2016, 2015 and 2014 scores. (N = 99)

18. Extent of Human Capital: Support Skills

The data on the skills to support on-ground work by environmental groups is positive. All nine areas in the survey have improved since 2014. The strongest (highest mean score) support skills in the community in 2017 were;

- planning and project management (3.9, +0.1);
- event planning and management (3.8, +0); and
- grant submission writing (3.8, +0.1).

In 2017, no human capital support activities received a mean score of less than 3.0. The three areas that were identified as the weakest support skills (lowest mean scores) all recorded improvements in their scores;

- current first aid certificates (3.3, +0.1);
- working with Aboriginal people (3.3, +1.0); and
- marketing and communications (3.3, +0.2).

Human capital- support activities	Mean scores			
	2017	2016	2015	2014
Current first aid certificates	3.3	3.2	2.2	2.6
Event planning and management	3.8	3.8	3.1	3.1
Financial management	3.7	3.6	3.4	3.1
Grant submission writing	3.8	3.7	3.4	3.2
Marketing and communications	3.3	3.1	2.5	2.6
Planning and project management	3.9	3.8	3.6	3.2
Records/information management	3.8	3.7	3.3	3.2
Technical expertise e.g. impact of climate change	3.1	3.1	2.6	2.5
Working with Aboriginal people	3.3	3.0	2.1	2.6

Table 5 Human capital support activity 2017, 2016, 2015 and 2014 mean scores.



19. Extent of Social Capital within Group

Social skills and the capital attributed to them are an important component of a successful environmental group. Three social skills have consistently received the highest mean scores from 2014 to 2017. They are:

- good relationships with external stakeholders;
- good hosts, creating a welcoming and pleasing environment for others; and
- good relationships with government agencies at all levels.

In 2017, three social capital areas, social media, website provision and engagement with Aboriginal community recorded increased on the 2015 scores. They were:

- social media skills e.g. Facebook and Twitter (3.6, +0.9);
- website development and administration (3.4, +0.8); and
- effective connections with the Aboriginal community (3.6, +0.9).

Overall between 2014 and 2017 there has been an increase in the mean score of all skills, but this has fluctuated with the skill area and between years. However, between 2016 and 2017, all areas recorded an increase in social capital skills, with most respondents agreeing that their group now has skills to effectively engage with environmental volunteers and the wider community.

Social capital skills	Mean scores			
	2017	2016	2015	2014
Attracting and retaining volunteers	3.6	3.1	3.1	NA
Effective connections with the Aboriginal community	3.6	2.9	2.7	2.3
Good hosts, creating a welcoming environment for others	4.2	3.9	4.0	3.5
Good relationships with external stakeholders	4.2	3.9	4.0	3.5
Good relationships with government agencies at all levels	4.0	3.7	4.0	3.4
Inspirational leadership	3.8	3.5	3.7	3.1
Social media skills e.g. Facebook and Twitter	3.6	3.1	2.7	NA
Strong networking/contact development skills	3.8	3.5	3.6	3.2
Trusted mediators deal with internal issues affecting the group	3.6	3.3	3.5	3.0
Website development and administration	3.4	2.9	2.6	NA

Table 6: Social capital – comparison of skills of 2016, 2015 and 2014 mean scores.

Section 4: Group Capacity and Resources

To improve the accuracy of the organisational and financial capital data of the 2017 survey, only nominated representatives were required to answer the survey questions in Sections 4: Group Capacity and Resources and Section 5: Partnerships. This method was employed to improve the reliability of the data provided, and to prevent replication of information on financial data and organisational capital. Leaders from 31 organisations participated, representing 46% of all the primary participating environmental groups (Table 1). Comparison of the 2016 and 2017 raw data indicated that similar numbers of participants provided enumerated answers to each of these questions in 2017, compared to high levels of the Unsure response in 2016.

20. Number of People in Environmental Groups

Environmental groups in the Swan Region generally have fewer than 50 members. Respondents most frequently reported that their group consisted of 6 – 10 people (22.6%), replicating the result of the previous two surveys. Responses were received for all size ranges, with six respondents reporting that their groups had over 101 members.

Participating groups with over 150 members included Baigup Wetlands Interest Group, Canning River Residence Environmental Protection Association, Friends of Lake Claremont, Friends of Yellagonga Regional Park, Mt Henry Peninsula Conservation Group and Conservation Volunteers Australia.

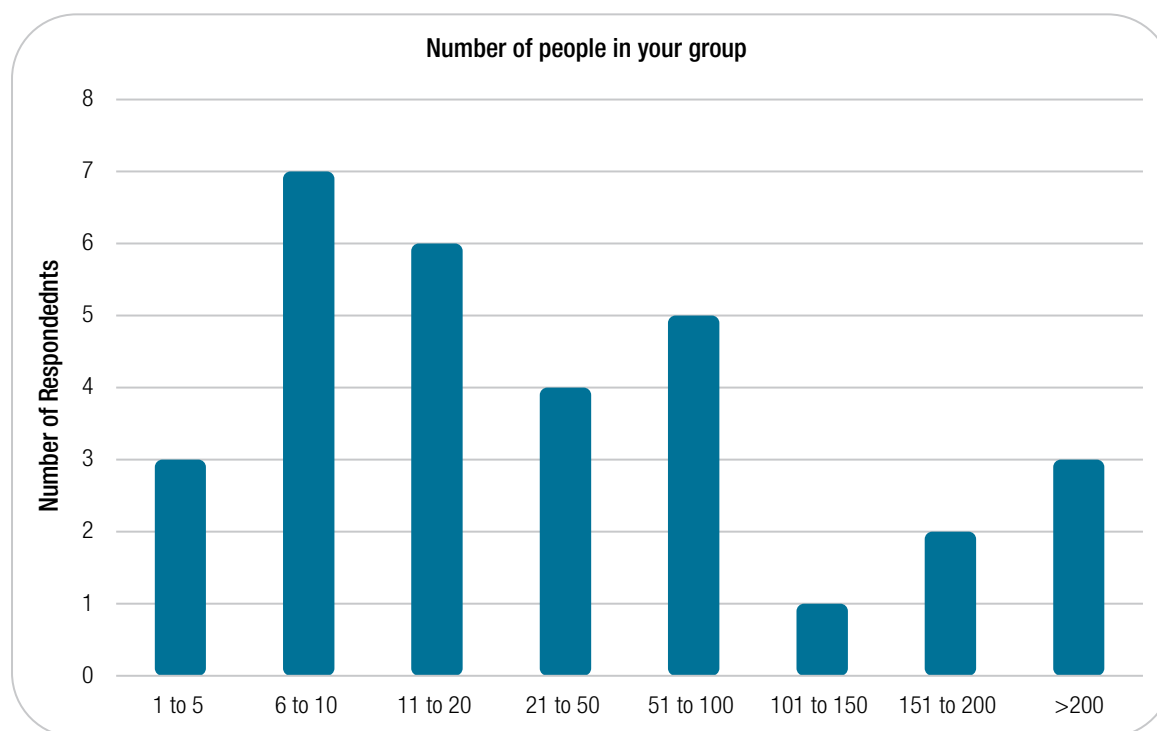


Figure 8: Number of people in environmental groups (n=31)

21. Prioritisation of NRM Projects

Positively, most participating respondents reported that they worked with their managing body, either the LGA or DBCA to jointly determine their priorities for NRM projects. Many also indicated that they either support their local government management plans (51.6%) or link into the local biodiversity plan produced by their authority (22.6%). Five respondents (16.1%) indicated that their priorities are informed by the results of mapping of their area's natural assets.

Almost one half of participants (14) answered that their group determines their own priorities. As in 2016, it is unclear if this is done in a systematic way, is based on the skills of the volunteers or their main areas of interest. Individuals that responded 'Other', commented that they work with their local NRM organisation or that it is determined by the physical capacity of their volunteers.

In comparison to 2016, no participants stated that no prioritisation process was used to make their decisions. Overall, respondents work collaboratively with the managing body or use recognised information sources to prioritise their NRM projects.

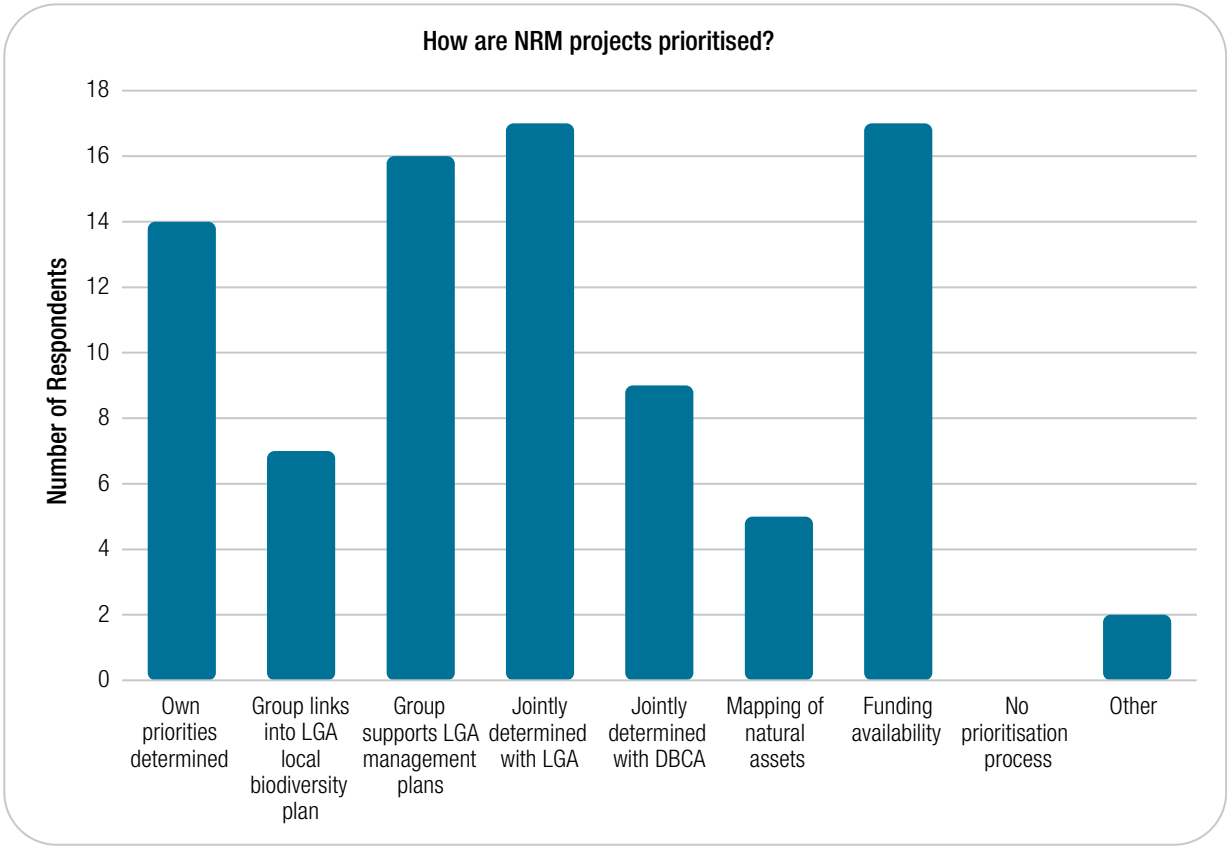


Figure 9: How groups prioritise NRM projects (n=31). Multiple responses were allowed.

22. Information Being Collected by Groups

A range of information is collected by the groups managing natural areas, with many undertaking two or more different types of monitoring. Of the groups that participate in data collection, monitoring of plants is most common, with 74.2% and 51.6% of them monitoring weeds and native plants, respectively. This pattern reflects the 2016 and 2015 results. Native fauna monitoring is also common with 32.3% (10) of participants indicating that their group records fauna data.

A range of additional information was collected by the respondents, but they reported that it is not always stored formally or shared with the managing bodies. This is reflected in the corresponding question. Some groups use digital technology to monitor native fauna and record the presence of pest animal species.

A smaller percentage of participants said that their group did not collect information in the past calendar year (16.1%), compared to 25% in 2016.

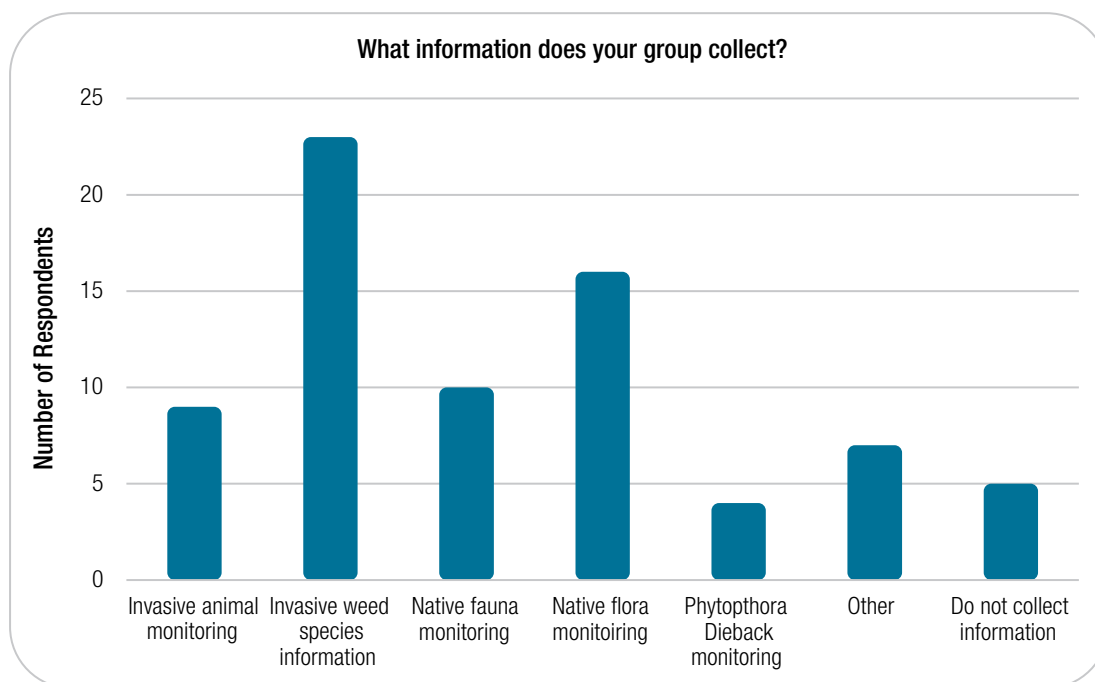


Figure 10: Data collected by groups (n=31) Multiple responses were allowed.

23. Sharing of Collected Information

Information collected by the participants was utilised by their groups or shared with government. Almost 82% of respondents reported they used the information to direct their activities. This response is much greater than that recorded in both 2016 and 2015. This response may reflect better management of data or the formal nomination of a group member of provide answers to questions relating to the management or governance of the group.

Positively, over 60% (17) of respondents reported that collected knowledge was distributed to their local government authority, and a further 22.2% reported that they shared information with state government agencies, including DBCA and the Department of Agriculture. Once again respondents identified that they distributed information to environmental organisations like BirdLife WA, provided information to their local NRM organisation, or reported it as part of their grant funding requirements.

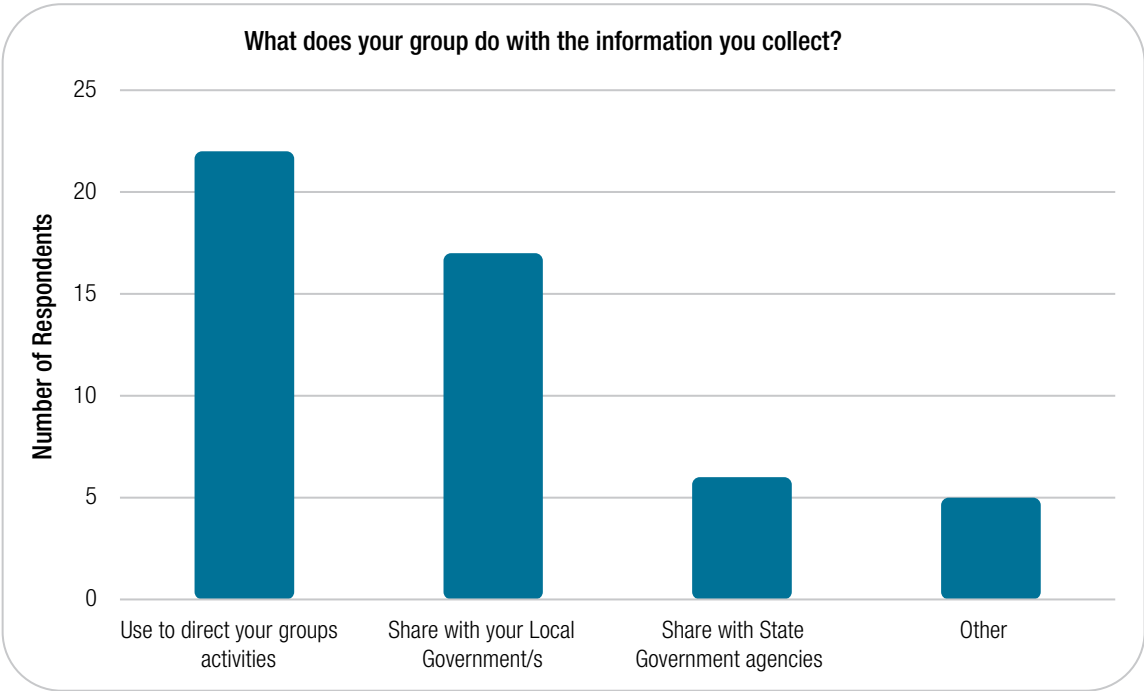


Figure 11: How groups use the information they collect (n= 27)

24. Organisational Capital

Over the previous three years the organisational capital of environmental groups had remained relatively steady, but in 2017 there was an increase in the means score for 10 of the 11 measures. The task of recording the hours worked (3.5) was again the most established task for groups.

Positively, no measures recorded a decline in mean scores in comparison to 2016 with only the presence of an orientation process and training for new members (2.4) recording a lower mean score in comparison to the original 2014 survey (2.5).

The results indicated that for most environmental groups their organisational systems are developed and are being implemented but there is still work to do around the documentation of policies and procedures (2.5), record keeping of assets both loaned to the group (1.6) and owned by the group (2.3) and risk assessment and management procedures (2.7).

Organisational assets	Mean score*			
	2017	2016	2015	2014
Documented policies and procedures	2.5	2.0	2.3	2.5
Financial management systems and procedures	2.8	2.2	2.5	2.3
Group website or Facebook page	3.1	2.8	NA	NA
Orientation process and training for new members	2.4	1.8	2.4	2.5
Records of equipment/assets loaned to the group	1.6	1.6	3.0	1.6
Records of equipment/assets owned by the group	2.3	1.8	2.1	2.6
Records of hours worked for on-ground and support activities	3.5	3.0	3.3	1.7
Risk assessment and management procedures	2.7	2.0	2.1	2.7
Safe work procedures	3.0	2.1	2.6	2.3
Terms of reference/constitution	2.9	2.5	3.0	2.8
Work plans identifying priorities and actions	2.9	2.6	2.8	2.1

*This question used a 4 point Likert Scale, where Not Available= 1, Being developed =2, Available= 3 and Established and Updated= 4. The mean of all responses was then determined.

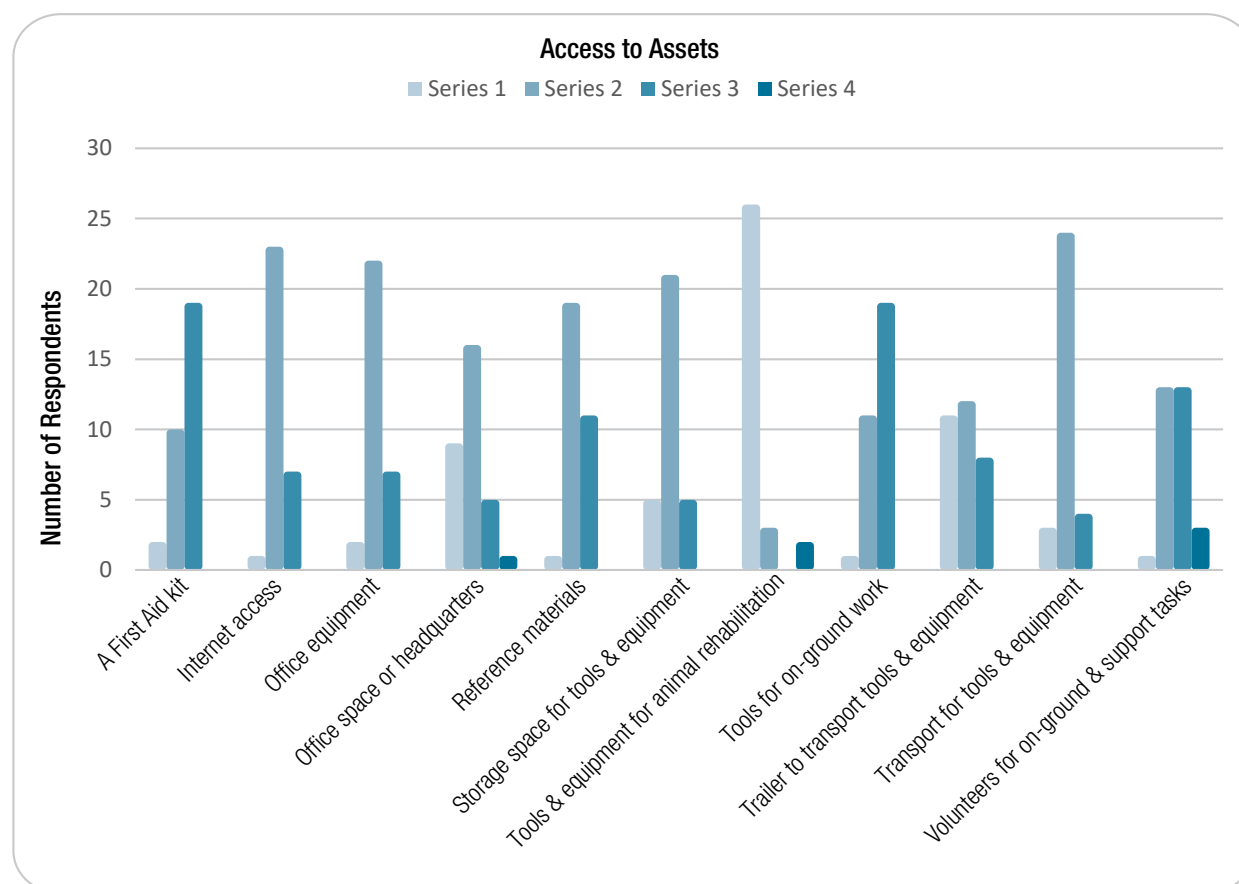
Table 10: Organisational capital: comparison of mean scores 2017, 2016, 2015 and 2014.



25. Financial Capital: Access to Assets

Volunteers are self-reliant, with individuals generally providing the assets for use by their group. This has been a consistent trend across the four consecutive years from 2014 to 2017. Equipment related to direct operational work is most frequently owned by the group with 38 respondents reporting their groups own a first aid kit and tools for on-ground work. Only two respondents reported this year that their group did not have access to a first aid kit and only one responded 'no access' to the question about tools for on-ground work.

Again, people reported that they predominately transport and store their own tools and equipment, use their own reference material and rely on their own office equipment as an asset. Specialised equipment for animal rehabilitation is unavailable to most groups. This probably reflects that specialisation of the knowledge and skills required and is consistent with the number of volunteer hours reported on the rehabilitation of injured native wildlife.



Series 1 No Access; Series 2 Assets belong to individuals or organisation supporting the group; Series 3 Assets owned by the group; Series 4 Unsure

Figure 12: Financial capital - access to assets. (n=31)

26. Incorporation

Of the 31 responses 54.7% (17) were from people in groups that were incorporated. This year's percentage result is again lower than the 61.1% (33) and 56.1% (69), recorded in 2015 and 2014. However, the result is higher than last year's response, and the data is of greater reliability as only one representative per group provided an answer.

27. Insurance

In 2017, 90.3 % of respondents reported that their group is insured for on ground activities (public liability). It is either held by the group (38.7%), by the LGA (32.3%) or by another body (19.4%) responsible for management of the area in which they work. This result is similar to the 2015 data (95.7% of environmental volunteers covered) and much higher than the figure of 42.5 % reported in 2016.

The discrepancy in the survey results between 2016 and those of 2015 and 2014 lead to a review of the question and providing respondents with a wider range of responses. Only, one recipient indicated that they were unsure if their group was covered by insurance in comparison to 12 (13.8%) in 2016.

One environmental volunteer group reported that they took out event insurance for a workshop and that they are now working with their local member to address insurance cover for volunteers from unincorporated groups working on land not managed by LGA or DBCA.

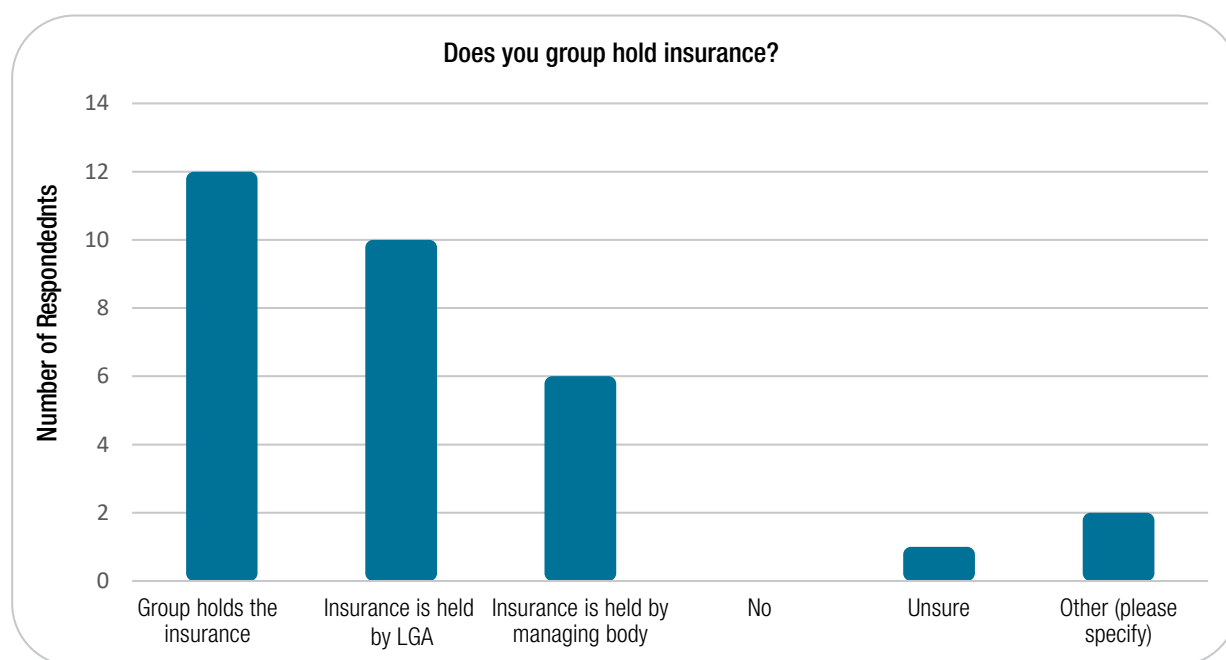


Figure 13: Insurance coverage by community groups (n=31)

28. Financial Capital: Viability

Grant funds are the most frequently reported source of funding by participants with 80.0% indicating their group had received grant funding in the past year. This result reflects the high reliance on grants in both the 2016 and 2015 surveys.

Long term financial viability of the groups is an on-going concern. The responses around income from regular, reliable sources such as membership fees was more positive in 2017 with almost half of the participants responding yes, in comparison to the figure reported in 2016 (21.7%). Similarly, more groups reported that their finances were augmented through corporate sponsorship (51.6 %), and more reflective of the data received in 2014, as opposed to the 2016 figure of 10.1% of participants receiving corporate sponsorship or in-kind funding.

Response	Yes	No	Unsure
We receive regular, reliable income	46.7% (14)	53.3% (16)	0% (0)
We receive corporate sponsorship or in-kind funding	51.6% (16)	48.4% (15)	0% (0)
We have received grant funds in the past year	80.0% (24)	20.0% (20)	0% (0)
Other	9.7% (3)	NA	NA

Table 11: Financial capital: financial viability (n=31)

29. Financial Capital: Income

Small funding sources of up to \$5,000 were again the most common type of income reported by participants, with 93 responses across the 12 different funding sources. There was a fairly even distribution of responses across sources greater than \$6,000. Positively, 20 cases of amounts of more than \$21,000 were recorded, a more positive result than 2016. The figures were better or at least as good as previous years, overall.

Of the eight types of grants identified, local government grants were most frequently accessed with 16 respondents indicating their group received up to \$5,000 in funding from their LGA. A further six respondents reported receiving local government grants of more than \$5,000. State NRM grants provided the largest number of large grants over \$20,000, with seven groups reporting that they successfully applied for funding through this mechanism.

In 2017, there was consistency between the results for the questions reporting reliable income or sponsorship funding and the provision of income data. Additionally, the number of Unsure responses was halved in most of the question categories. Identifying a nominated representative for each group appears to have assisted with the consistency in the data.

Type of Income	Value of Income Per Annum \$					Unsure	n
	0 - 5,000	5001 - 10,000	10,001 - 15,000	15,001 - 20,000	> \$20,000		
Income from regular reliable sources	81.8% (18)	4.6% (1)				13.6% (3)	22
Corporate sponsorship or in-kind contribution	57.1% (12)			4.8% (1)	23.8% (5)	14.3% (3)	21
Philanthropic donations	69.3% (9)				7.7% (1)	23.1% (3)	13
Grants							
Local Government	72.7% (16)	22.7% (5)				4.6% (1)	22
Lotterywest	54.6% (6)	9.01% (1)				36.4% (4)	11
Swan Alcoa Landcare Program	23.5% (4)	17.6% (3)	17.6% (3)	11.8% (2)	5.89% (1)	23.5% (4)	17
Australian Government	30.8% (4)			15.4% (2)	23.1% (3)	30.8% (4)	13
State NRM	16.7% (4)	11.1% (2)		11.1% (2)	38.9% (7)	22.2% (4)	18
Perth NRM	36.4% (4)			9.1% (1)	9.09% (1)	45.4% (5)	11
Coastcare	41.7% (5)	16.7% (2)			16.7% (2)	25.0% (3)	12
Philanthropic Foundations	50.0% (5)		10 % (1)			40.0% (4)	10
Other	77.8% (7)					22.2% (2)	9

Table 12: Financial income showing grants received in the last 12-month period (n=30)

30. Use of Contractors by Community Groups

In 2017, 74.2% of groups indicated that they contracted external organisations to assist with their activities. All respondents were certain about their group's use of contractors, compared to 17.3% in 2016 that were unsure if their group utilised them or not.

31. Proportion of Work Undertaken by Contractors

Twenty-three groups, of the 31 participating in this part of the survey, reported that they use contractors to assist with their NRM activities. Most of these community groups undertake their on-ground work with minimal additional assistance from contractors. Forty four percent contract out less than 10% of their total activities, and a further 21.7% contract out between 11%-25% of their work.

The results for the past three surveys were similar with at least 80% of groups contracting out 50% or less of their environmental work.

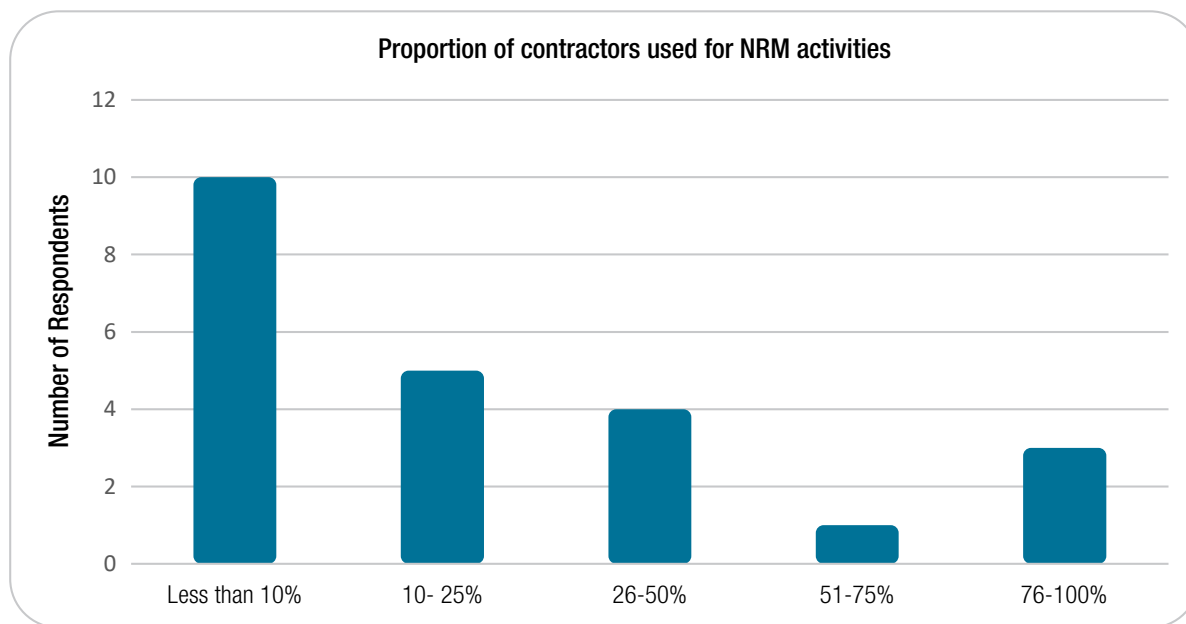


Figure 14: Proportion of activities undertaken by contractors (n=23)





32. Activities Undertaken by Contractors

Weeding was the main activity (78.3%) identified as being contracted out by respondents, followed by planting projects (13.0%). There is now a consistent trend over the past three surveys, from 2015 to 2017, that the management of weeds is the main NRM activity contracted out. Six environmental volunteer groups indicated they relied on contractors to undertake chemical control of weeds, large scale weed management activities, like removal of *Typha* sp. from wetland areas, or removal of large woody weeds.

Like previous years contractors played a significant role in assisting with operational work that required specific skills or is regulated. Respondents again identified erosion control, dieback interpretation and management, trapping of feral animal and herbicide spraying as activities that require external assistance.

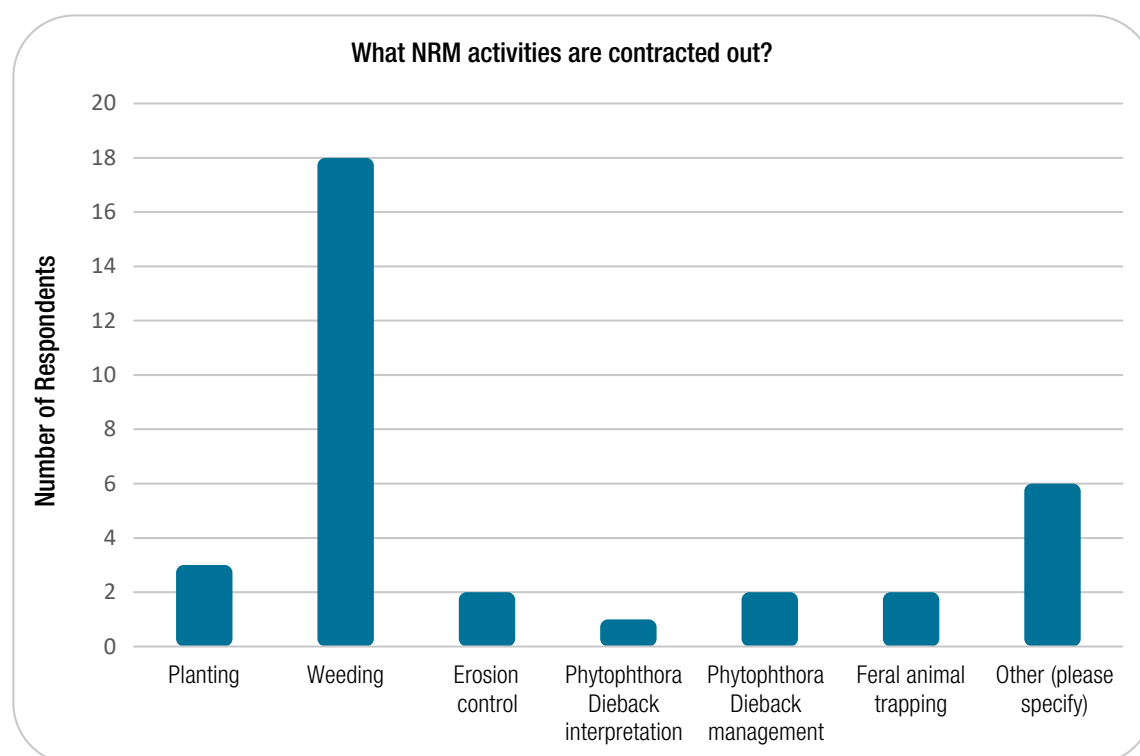


Figure 15: Activities being contracted out by groups. Note: The total is greater than 100% as respondents were able to identify multiple activities (n=23)

Section 5: Partnerships

33. Level of Inclusion and Support Community Groups Receive from Local Government

Undertaking joint on-ground work together (87.1%) and providing funds to undertake the operational work (64.5%) or tools and equipment (63.3%) were identified as the areas where local government provided the highest level of support and inclusion of environmental community groups. Many respondents (54.8%) reported that their groups were involved in strategic planning. These areas were also amongst the most positive responses in 2016 and 2015.

Most groups indicated, once again, that they are not provided with support in relation to guidance with Aboriginal consultation or learning about Aboriginal culture. These two questions also recorded the highest level of uncertainty about the level of support provided by local government. These results replicate the 2015 and 2016 survey.

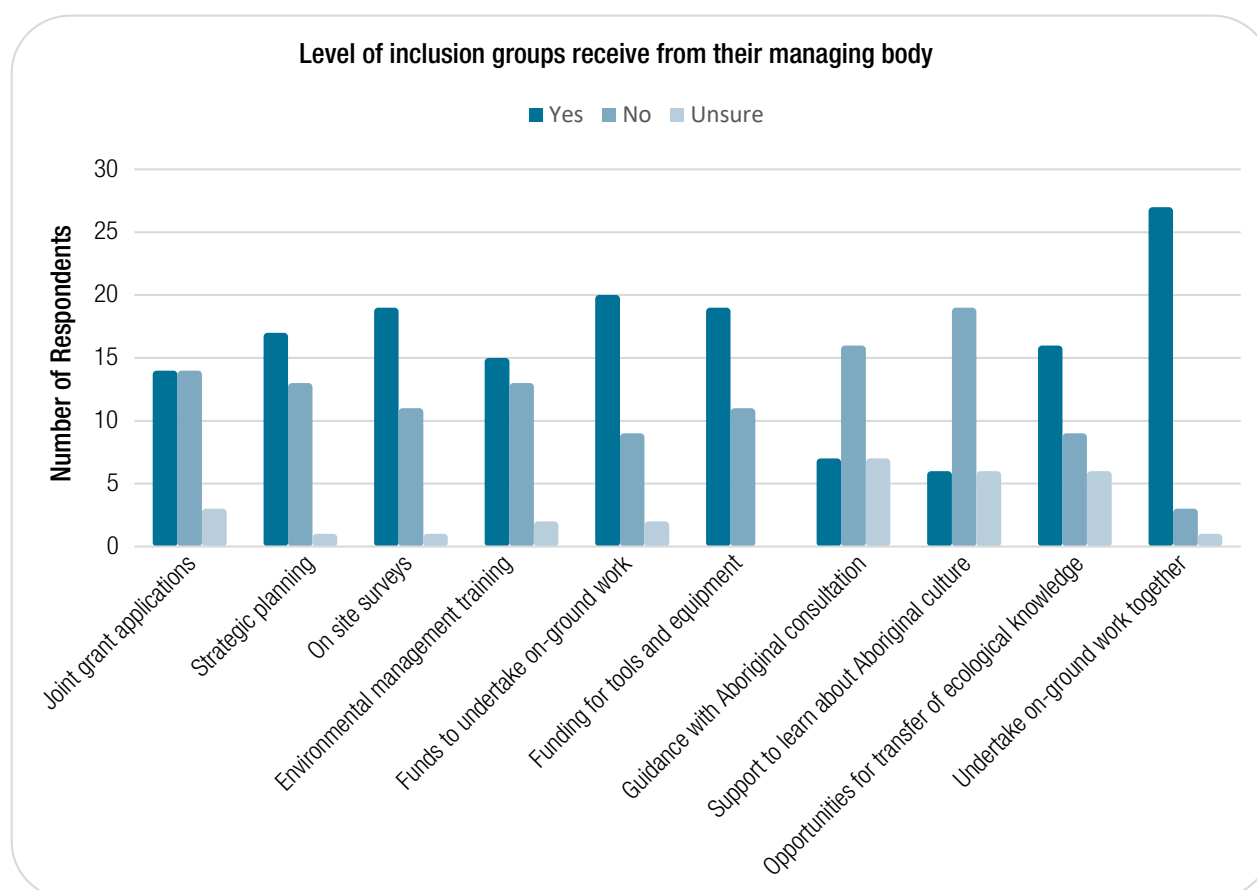


Figure 16: Level of support and inclusion provided by the managing body (n=31)

34. Effectiveness of the Relationship with the Managing Body

Of the 31 respondents who rated the effectiveness of their group's relationship with the managing body, most 71.0 % (22) reported they had a positive relationship, with their managing body, and that it is effective or extremely effective. A small number of respondents reported that more work is required to improve the working relationship between community and the managing body. One respondent reported that they did not work with a managing body or local government.

Survey participants have consistently reported that their relationship with local government over the past three years was generally successful. The number of respondents has varied from 2014 to 2017, but between 70.0% and 85.0% of people considered the relationship to be effective or better during this period.

Responses	Percentage	n
Our group does not work with LGA or managing body	3.2%	1
Needs a lot of work	6.5%	2
Needs some work	3.2%	1
Neutral	16.1%	5
Effective	35.5%	11
Extremely effective	35.5%	11

Table 13: Effectiveness of the relationship between the community group and the managing body (n=31)

35. Actions to Improve Working Relationships

Making more funds available to deliver increased NRM outcomes was again seen as the most effective way to improve the relationship between community and local government, as in the two previous surveys.

Comparison of the 2017, 2016 and 2015 data shows a similar pattern for these responses. Funding, volunteer recruitment, increased communication and developing shared understanding of NRM outcomes were identified as the top four priorities in each of the three years.

A number of respondents took the opportunity to provide additional feedback on their group's working relationship with the responsible body. Generally, their responses reflected the desire for better communication and for their skills and knowledge to be considered as a valuable part of the environmental planning and operational program.

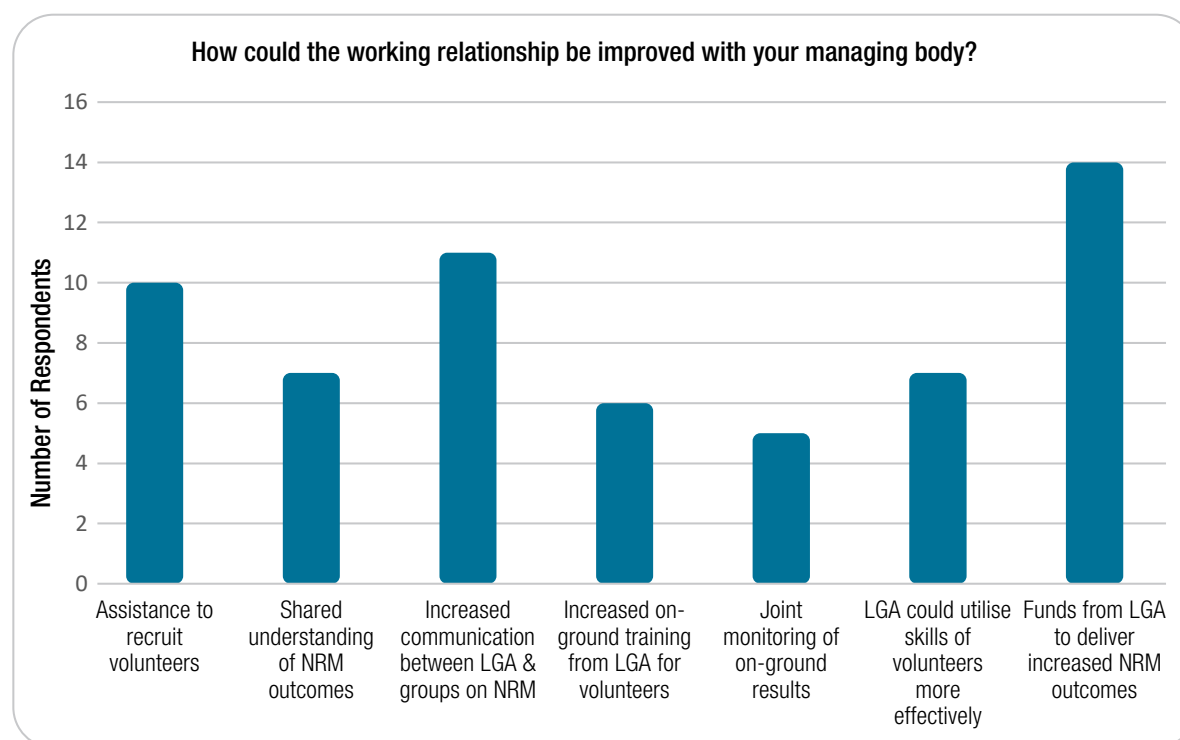


Figure 17: Action to improve the effectiveness of the relationship between the community group and the managing body (n=23)

Section 6: Summary of the Capacity Gaps for NRM

A summary of identified gaps in volunteer groups' capacity to provide NRM outcomes in relation to human, social, financial and organisational capital is provided in the following table.

In 2017, there was a noticeable improvement in the results provided for human, social, financial and organisational capitals of the participating environmental volunteer groups. The number of capacity gaps identified in 2017 was 20 compared to 31 areas that needed capacity building in 2016.

Capital	Capacity gaps identified
Human capital – on-ground and support investment *	Methods for releasing native fauna back into the wild
	Rehabilitation of injured native wildlife
	Terrestrial pest animal control – trapping and baiting
	Scientific water quality monitoring
	Selection of indigenous aquatic plants and where to plant them
	Identification of indigenous aquatic flora and fauna
	Soil monitoring
Financial capital – income and assets investment ***	Storage for tools and equipment
	Office space or headquarters
	Transport (including trailer) to transport tools and equipment
	Tools and equipment for animal rehabilitation
	Regular reliable sources of income
	Increased corporate sponsorship/in kind contributions
Organisational capital investment **	Records of equipment borrowed or loaned by the group
	Records of equipment borrowed or owned by the group
	An orientation process and training for new members
	Documented policies and procedures
	Risk assessment and risk management procedures
	Local government to provide guidance on Aboriginal consultation and culture
	Local government and community groups to develop joint grant applications

*Human Capital 2017 mean score ≤ 3.0 ; Organisational Capital 2017 mean score ≤ 2.5 ; ***Financial Capital No Access Response $\geq 30\%$

Table 14: Summary of capacity gaps identified through the 2017 survey



COMMUNITY CAPACITY ASSESSMENT

A report on the 2017 survey

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