



The Your Region, Your Input Community Survey is an initiative of North Stirlings Pallinup Natural Resources Incorporated (NSPNR) and is funded from the Australian Governments Regional Landcare Partnerships Program via South Coast Natural Resource Management Inc. Project management by Clear South.

This document has been produced in accordance with the Engagement Agreement between the Clear South and NSPNR in relation to the NSPNR 2020 community survey and strategic planning project. It has been prepared using the standard, skill and care typically exercised by consultants in the preparation of such documents. Any person or organisation that relies on or uses the document for purposes or reasons other than those set out in the report, without first obtaining the prior written consent of Clear South, does so entirely at their own risk. Clear South denies all liability in tort, contract or otherwise for any loss, damage or injury of any kind whatsoever, whether in negligence or otherwise, that may be suffered as a consequence of relying on this document for any purpose other than for what it is intended. Report reviewed by Nadene Baldwin, Principal, HSE Consulting.

Acknowledgements

Laura Page and Johanna Tomlinson are pleased to report the findings of the NSPNR 2020 Your Region, Your Input Community Survey. On behalf of the NSPNR Management Committee we would like to extend thanks and appreciation to South Coast Natural Resource Management Inc. for providing the funding, the survey prize sponsors; Wescape Photography, The Pub Borden and Graze Great Southern and the NSPNR partners and representatives, including the Shire of Gnowangerup and Shire of Broomehill-Tambellup and their communities, for assistance with the survey's promotion. Thank you.

Thank you to all the respondents. Your involvement is greatly valued and appreciated and provides critical input as NSPNR work on setting the course for natural resource management in the North Stirling – Pallinup sub-region.

Finally, thanks to the NSPNR Management Committee. You are a dedicated and loyal group, passionate about the future of your area who see the precious benefit in engaging broadly with your community. You are now charged with the important task of making use of this valuable information as you set the big picture strategy for the North Stirlings-Pallinup sub-region.

The authors

Johanna Tomlinson, Principal, Clear South

Johanna Tomlinson is a project management consultant and South Coast farmer who is passionate about regional communities and the businesses and community groups that support them. She holds a Bachelor of Environmental Science from Murdoch University, is a 2019 Nuffield Australia Farming Scholar and has over 20 years of experience in agriculture, natural resource management and business management and administration. Together with her husband and their team, Johanna is a proud WA grower producing beef and lamb for WA consumers as well as grain and fodder for domestic and international markets. Continual improvement processes are important to Johanna and she is excited about the future of agriculture as it progresses to achieve sustainability in its broadest sense.



Laura Page, Project Officer, NSPNR

Laura Page is a project officer and holds a Bachelor of Science in Agriculture from the University of Sydney. She cares strongly about the sustainable use of natural resources and has supported North Stirlings Pallinup Natural Resources in various capacities since 2013. As a community member of the North Stirlings - Pallinup sub-region, Laura has experienced first-hand the vulnerability and resilience of the local environment and the people that it supports. She is inspired by the synergies that develop when people come together to collaborate on natural resource management.



Contents

Acknowledgements	i
The authors	
Contents	
Image credits	
Key findings	
Introduction & background	
Survey design & delivery	5
Findings	6
Discussion and recommendations	22
Conclusion	28
References	29
Appendix I	30

Image credits

- Page 5, Rustic Ranges, Navigator Photographix.
- Page 8, Middle Pallinup, Geraldine Janicke.
- Page 21, Messina with root nodules, NSPNR.
- Page 27, Native vegetation, NSPNR.
- Page 29, Field day, NSPNR.
- Page 31, Australasian Bittern chick, Andrew Silcocks, BirdLife Australia.



Key findings

146 Community members took the opportunity to have their say in shaping the future of the natural resource management in the North Stirlings-Pallinup sub-region.

There is a high level of awareness of the NSPNR as a Landcare group.

Performance of NSPNR has room for improvement, particularly around communications.

Membership potential is high; however, it is recommended the model is reviewed to ensure the future membership provides increased value to members and NSPNR.

The Community value a range of environmental, social and economic aspects of the sub-region and they are concerned about a range of environmental issues, particularly agricultural production issues and issues impacting the biodiversity of the region.

Support for current Services and activities is good but there is stronger support for a range of potential future services and activities, particularly in relation to pest control, salinity and regenerative agriculture. Generally, there is strong indication for NSPNR to consolidate and reset its focus.



Introduction & background

The North Stirlings-Pallinup sub-region

The North Stirlings-Pallinup sub-region is located within the wider South Coast natural resource management region of Western Australia which is internationally recognised as being one of one of the world's 34 biodiversity 'hot-spots' (SCNRM, 2016). The sub-region covers an area of more than 540,000 ha, incorporating the entire Shire of Gnowangerup and the locality of Broomehill-Tambellup (see figures 1 and 2).

The sub-region is uniquely defined by being the upper catchment of the Pallinup River, encompassing all major tributaries, being Jackitup Creek, Warperup Creek, Peenebup Creek, Six Mile Creek and Salt Creek. The Pallinup River is one of the largest river systems on the South Coast, spanning roughly 250km long. Wetlands are an integral part of this catchment system, encompassing large areas of internal drainage (salt lakes) in the south-west corner. The Balicup Lake System consists of several wetlands occurring in small nature reserves or on private land. They are important partly because of range of species of waterbirds that they support, including some like the Banded Stilt that are protected under international treaties. The Pallinup River traditionally supported important campgrounds, travel routes, food sources and drinking water for the Koreng, Kaneang and Minang people.



Figure 1: NSPNR area of operation in relation to the South West corner of Western Australia; a global biodiversity hotspot.

concern particularly for the Stirling Range National Park (SCNRM, 2016).

Over 80% of the landscape of the sub-region is utilised for agricultural production which is predominately broadacre and dryland with outputs including cereal grains, legumes and oilseeds; sheep for meat and wool production; and beef cattle.

In terms of natural resource management issues, the South Coast Snapshot report identified that the sub-region has moderate soil carbon abundance, poor soil acidity, fair water repellence condition, low wind erosion hazard and moderate salinity risk and phytophthora dieback is a

About the NSPNR Inc organisation

North Stirlings Pallinup Natural Resources Inc. (NSPNR) is the peak association for natural resource management in the North Stirlings-Pallinup sub-region. It was incorporated in 2003 as a not-for-profit organisation and operates out of the Pallinup Landcare Centre building in Borden. The group was established to address natural resource management issues across the sub-region previously serviced by the Gnowangerup Land Conservation District Committee which was a highly active land conservation group that operated from the 1980s.

Since its inception, NSPNR has attracted nearly \$6 million in funding to support natural resource management in the subregion, with over 90% being directed to on-ground works, sustainable farming trials, research and environmental outcomes (NSPNR, 2020).

"Landcare is important as a whole of Shire and catchment process"

The group is managed by a volunteer committee of community members and has four part-time staff who work with NSPNR partners to coordinate and deliver the groups services and activities out the group's activities. Predominantly income streams to enable operations are through projects funded by grants from State and Federal Government (either directly or via South Coast Natural Resource Management Inc. Partnership are especially important to NSPNR with relationships with landholders and the Shire of Gnowangerup (who both contribute significantly by way of in-kind support) being of high importance and value to ensure the broader natural resource management objectives for the sub-region can be achieved.

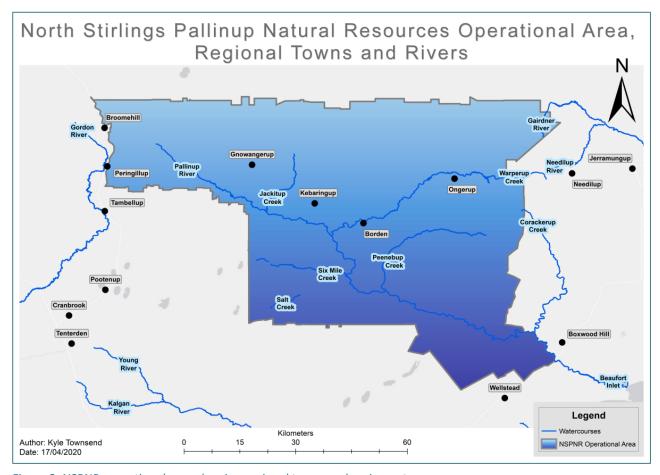


Figure 2: NSPNR operational area showing regional towns and major waterways.

Survey project background & management

In 2018, the then NSPNR Management Committee commissioned an urgent future strategy planning workshop. At the time there was a lot of concern within and for the group with a realisation that without developing and taking critical actions there was a likelihood of the NSPNR closing. With a resolve to improve the groups function and guarded optimism for the future, the NSPNR Management Committee were guided to develop a range of governance and operational actions which they have since been working to deliver. This community survey and the development of a strategic plan will represent the achievement of two further actions identified at this workshop.

In early 2020, South Coast Natural Resource Management Inc. provided financial support to NSPNR to enable the Your Region, Your Input Community Survey and following strategic planning process. Clear South, who had worked with the group in 2018, was contracted to deliver the project and a project team consisting of Johanna Tomlinson of Clear South and Laura Page of NSPNR was established.

Research aim, objectives, outputs & outcomes

The overall **aim** of the 2020 NSPNR: Your Region, Your Input Community Survey was to engage with the wider North Stirlings-Pallinup sub-region community to capture their feedback and insights as critical research into the development of the next iteration of the NSPNR Strategic Plan and to provide guidance in NSPNR operations.

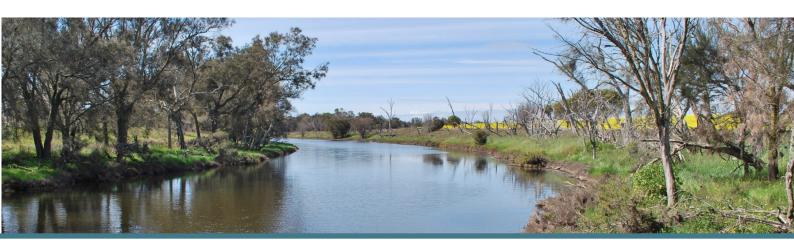
The key **objectives** of the 2020 NSPNR: Your Region, Your Input Community Survey were:

- 1. **Representative sample**: Maximise the response rates to the survey to ensure a reliable and representative sample of the North Stirling-Pallinup community.
- 2. Awareness of NSPNR and performance: Identify the level of awareness of and support for NSPNR and gauge community opinion on the performance of NSPNR to provide NSPNR with critical community analysis to be later matched against self-reflection as part of the strategic planning process and to support effective operations.
- 3. **Community values and concerns**: Gain an appreciation of community values, concerns and opinions in relation to the environment, including climate change, to ensure that NSPNR strategy and operations are informed by the broader community.
- 4. **NSPNR operations**: Gauge the level of community support for current and prospective services and activities and volunteering and establish communication preferences to ensure NSPNR operations best align with community needs and wants and that the group is best placed to achieve its strategic objectives.

The key outputs of the 2020 NSPNR: Your Region, Your Input Community Survey were:

- 1. 2020 NSPNR: Your Region, Your Input Community Survey and associated marketing material.
- 2. 2020 NSPNR: Your Region, Your Input Community Survey report.
- 3. Presentation of survey findings to NSPNR management committee and staff.

The key **outcome** of the 2020 NSPNR: Your Region, Your Input Community Survey will be that the North Stirlings-Pallinup community will contribute to the 2020 NSPNR strategic planning processes and the effective operations of NSPNR.



Survey design & delivery

Project management & key communications

A dedicated project plan and communication plan were developed and executed with a focus on stakeholder engagement to maximise the response rate for the survey and ensure a representative sample. The survey was open to respondents from 1st July to 31st July 2020. Flyers, media releases in local newsletters, direct emailing and social media were key communication tools directing potential respondents to the survey. All NSPNR partners actively promoted the survey within their own networks which included email and social media.

Survey design and data analysis

The survey design was scoped in consultation with the NSPNR Management Committee who determined that the population was the entire sub-region and all its residents. A sample size was not predetermined. Statistical analysis of the data was not undertaken and no weighting has been applied to the data collected. Filtering of the data based on demographic findings was undertaken to compare respondent groups with each other and the total sample. Throughout the report the number of respondents is referred to as the 'n' value. Where percentages do not total 100%, this is due to respondents selecting multiple responses.

Method of analysis for open-ended questions

To enable analysis and interpretation of the responses received in open-ended survey questions, the following methodology was utilized:

- 1. Response raw data was initially reviewed and categories were then identified and defined.
- 2. Each response was then tagged with the appropriate categories triggered by the key words and phrases provided in the response. For example, in the question "How could NSPNR improve what it does?" the response "More involvement from locals" was tagged "Volunteers".
- 3. With all responses tagged, the total number of 'hits' for each category was calculated to develop the data presented in this report. Essentially the total 'hits' is the number of times a category was triggered in the responses.

Findings

A representative sample

The 2020 NSPNR: Your Region, Your Input Community Survey received 174 responses with a completion rate of 84% capturing **146 valid responses**. According to the Shire

This section provides the demographic information of the survey respondents (the sample) to help the reader understand how representative and reliable the research is in applying it to the wider community.

of Gnowangerup 2016 Census QuickStats (noted as the primary local government area of the North Stirling-Pallinup sub-region), the population of persons aged 20 years and over is 934 (population size) which provides a response rate of 15.1% for the survey and a **margin of error of 7.45% with a 95% confidence level** (Australian Bureau of Statistics, 2020; CheckMarket, 2020). This means, for example there is a chance that between 54.7% and 69.6% of North Stirlings-Pallinup community members prefer email as a form of communication.

According to the Shire of Gnowangerup 2016 Census QuickStats, 46% of the population are female and 54% are male. The survey attracted a marginally higher proportion of female respondents (50.4% of respondents) than male respondents (48.9% of respondents) as shown in figure 3.

A relatively even spread of responses from across the age ranges was attained with the 50-59-year-old age range more greatly represented (26.7% of respondents) and much smaller representation received from the <20 year old age range (3.4% of respondents) as shown in figure 4. In comparison to the Shire of Gnowangerup Census QuickStats, the sample is considered representative with similar proportions in age groups of the respondents from the total Shire of Gnowangerup population being received with notable exceptions being a greater proportion of 50-59 year old's represented in the responses and under half of the 60+ year old's represented in the responses.

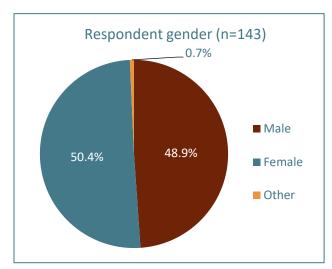


Figure 3: Respondent gender (n=143).

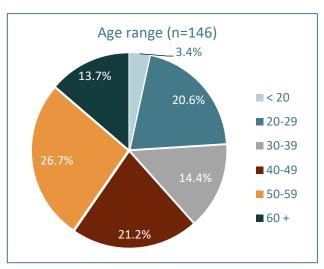


Figure 4: Age range of respondents (n=146).

The greater proportion of respondents were from Gnowangerup (26.8%), Borden (14.8%), Ongerup (13.4%) and Amelup (13.4%). Other locations cited (of which there were eight responses) were Katanning, Boxwood Hill, Lake Toolbrunup, Toolbrunup, Mt Barker and Kamballup.



Figure 5: Locality of respondents (n=142).

Figure 6 shows that the greater proportion of respondents were self-employed/ business owners (58.0%) and employees (41.3%) and figure 7 goes on to indicate that overwhelmingly the greater proportion of respondents were from the agricultural industry (76.6% of respondents) when compared to respondents from other industries (23.4% of respondents), which is in line with the census information for the area (Australian Bureau of Statistics, 2020). Other industries cited which were not on the predetermined list were: financial and business services (accounting), personal service, chaplaincy and tourism.

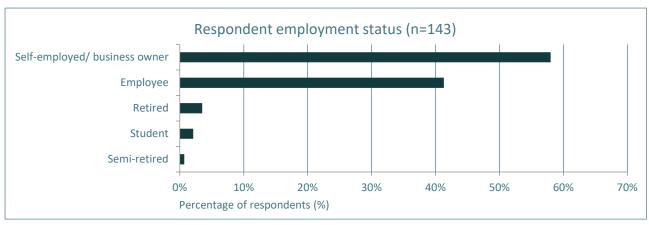


Figure 6: Respondent employment status (n=143).

It is the opinion of the authors that in recognition of the survey design and the exploratory nature of the survey, that the response rate and representativeness of the survey sample are acceptable for the purposes of this report and the strategic planning processes of NSPNR. In considering the subsequent findings of the survey, it will be important to remember that the data is highly representative of the agricultural industry.

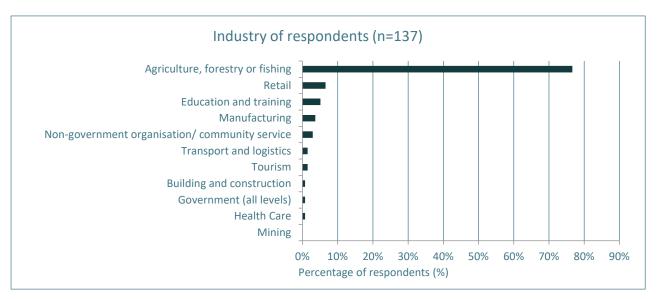


Figure 7: Industry of respondents (n=137).

Awareness of NSPNR

Most survey respondents were aware of NSPNR with 89.7% indicating that they had heard of the group as shown in figure 8. Filtering the responses

This section provides findings in relation to community awareness of the group and its operating premises and explores community opinion on NSPNR as a Landcare and grower group.

by industry did not produce any variance to awareness levels and there was no significant variance in the age ranges with the exception of a marginally greater portion of 40-49-year olds (93.3%) and 50-59 year olds (92.3%) having heard of NSPNR. Of the female respondents, 95.8% had heard of NSPNR compared to 84.3% of male respondents. The location of the respondents provided some interesting variations where it was identified that 95.2% of the respondents who identified as being from Borden and 94.7% who identified as being from Ongerup had heard of NSPNR, as opposed to 71.0% of respondents who identified as being from Gnowangerup.

In comparison to the awareness of the organisation, the awareness levels of the NSPNR office/ operating premises, the Pallinup Landcare Centre, were slightly lower with 82.2% of respondents indicating that they had heard of the Pallinup Landcare Centre as shown in figure 9. Interestingly, 76.2% of respondents who identified as being from Borden and 63.2% of respondents who identified as being from Gnowangerup had heard of the centre compared to 94.7% of respondents who identified as being from Ongerup. Again, filtering the responses by industry did not produce any significant variance. Filtering by age did produce slight variations noted in the 20-29-year olds with 73.3% of respondents and a greater proportion (87.2%) of the 50-59-year olds and 60+ year olds (90.0%) having heard of the centre.

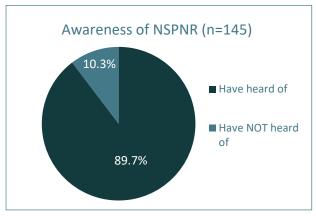


Figure 8: Awareness of NSPNR (n=145)

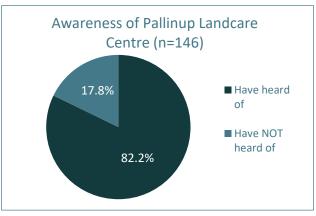


Figure 9: Awareness of Pallinup Landcare Centre (n=146).

Respondents overwhelmingly considered NSPNR to be a Landcare or natural resource management group (97.2% of respondents) as shown in figure 10, however, only 53.5% of respondents considered NSPNR to be a grower group as shown in figure 11 with the proportions being relatively similar when comparing industry and gender with slightly less males not considering NSPNR to be a grower group (50.8%). In consideration of the age ranges, figure 12 shows that the 60+ year old's, 40-49-year old's and <20-year old's more greatly considered NSPNR to be a grower group.

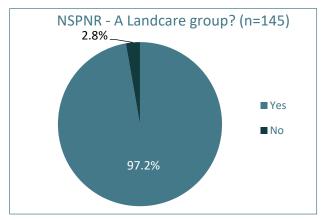


Figure 10: Responses to "Do you consider NSPNR to be a Landcare/natural resource management group?" (n=142).

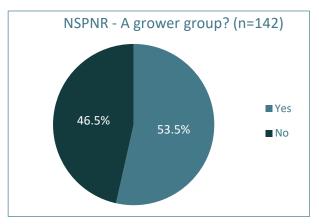


Figure 11: Responses to "Do you consider NSPNR to be a grower group?" (n=142).

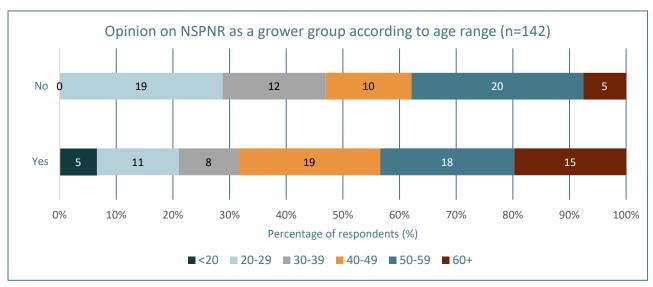


Figure 12: Opinion on NSPNR as a grower group according to age range (n=142).

NSPNR membership

When respondents were asked whether they were members of NSPNR, 69.0% of respondents did not identify as being members,

This section provides information relating to the level of support for NSPNR through membership.

conversely 31.0% identified as being members as show in figure 13. When membership was examined by age of the respondent, the age group most likely to be a member was 50-59 (n=38), at almost half (47.4%) of the age group identifying as members. Respondents < 20 years of age (n=5) were not members; of those aged 20-29 (n=30), 23.3% were members; 26.7% of 40-49 (n=30) were members; 28.6% of those aged 30-39 (n=21); and 30.0% of the 60+ age group (n=20) were members.

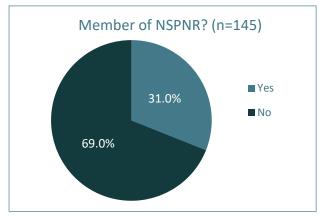


Figure 13: Member of NSPNR (n=145).

Filtering the responses by industry produced significant variance to membership, identifying that respondents who were in agriculture were much more likely to be members of NSPNR (41.4% of agricultural respondents) compared to only two respondents indicating they are members and in other industries as shown in figures 14 and 15.

"Many people are put off as they are time poor"

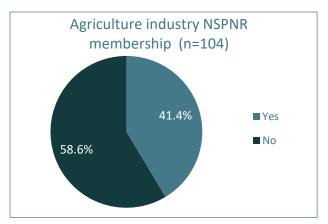


Figure 14: NSPNR membership in agricultural industry respondents (n=104).

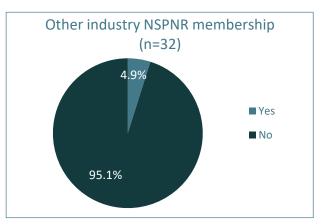


Figure 15: NSPNR membership in other industry respondents (n=32).

When providing reasoning for not being a member, the most common response was 'I'm not sure what NSPNR offers' (31.8% of respondents) followed by time and lack of awareness of the group, as shown in figure 16. Conversely, the response that yielded the least responses was 'I've been a member before and didn't get any value out of it' (two respondents).

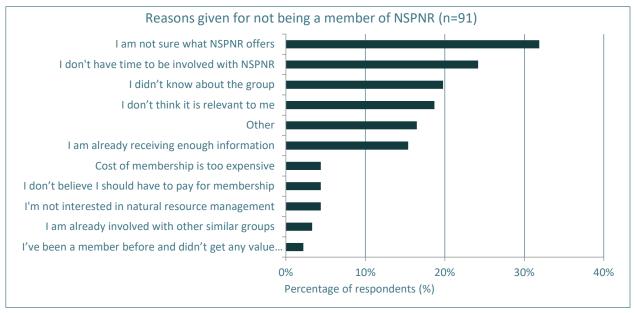


Figure 16: Reasons for not being am NSPNR member (n=91).

'Other' comments provided around why respondents were not members included:

- Membership was not a high priority (n=7),
- Unaware of NSPNR membership (n=4),
- Thought they didn't qualify because NSPNR was only for farmers or they were not sure they could be useful (n=3),
- Family members or family farm was member of NSPNR (n=2),
- Membership was not suitable for them (n=2),
- Expressed dissatisfaction with past board members (n=1), and
- Not sure if they were members (n=1).

NSPNR performance

In relation to value from membership as a measure of performance, of the respondents that identified as members, 30.4% felt they got a lot of value from their membership and

This section provides information relating to the performance of NSPNR from a community point of view.

65.2% felt they got some value from their NSPNR membership. Figure 18 shows that 4.4% of respondents felt they got no value from their membership. All the respondents to this question were employed involved in agriculture.

Respondents who were members of NSPNR were asked to provide positive and negative feedback about their membership. Nineteen positive feedback comments were received in relation to membership which provided praise for NSPNR's customer service. Seven negative feedback comments were received which included encouraging more, and better, communication and wanted more research projects.

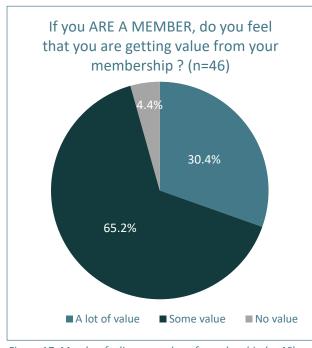


Figure 17: Member feelings on value of membership (n=46).

Respondents provided feedback to the group around performance across a range of areas as indicated in figure 18. The areas where NSPNR is doing very well or sufficiently are accessing funding to support environmental work in the area (24.8% and 27.3% respectively), followed by implementing conservation (23.8% and 30.07% respectively respondents) and monitoring and evaluation (14.7% and 14.4% respectively). The areas where NSPNR could do better were most commonly reporting to the community on what NSPNR is working on (30.1% of respondents), followed by reporting to the community on the state of the environment (25.2%) and social media (21.4%), as shown in figure 18. Generally, the respondents indicated that communication to the community could be improved.

"More public awareness of environmental problems"

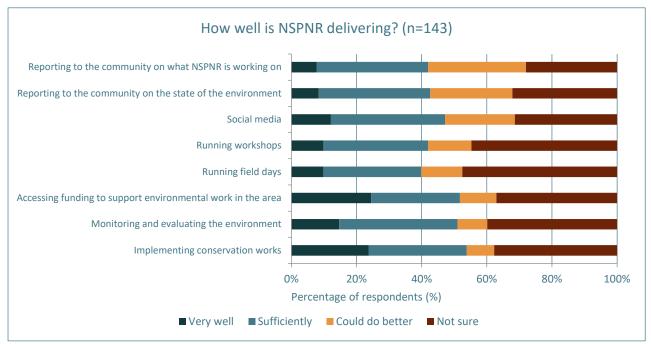


Figure 18: How well is NSPNR delivering? (n=143).

Across all areas of delivery and compared to other Industries respondents, agriculture respondents were more likely to respond that NSPNR was performing very well or sufficiently. Other industry respondents were more likely to respond that they 'were not sure' across the delivery areas.

Survey respondents were asked how NSPNR could improve what it does, with 35 responses received. The key suggestions from respondents were that NSPNR needed improved communication (16 respondents) and better promotion of the group and activities was required (11 respondents).

The survey respondents were given the opportunity to express any final comments and of the 13 responses received, most were positive and encouraging of NSPNR and the work they do, including praise for conducting this survey.

Community values and concerns

Figure 19 shows the level of support for a range of predetermined values for the North Stirlings-Pallinup area. Local businesses and the

This section provides information relating to respondent values and concerns for the environment.

Stirling Range National Park were identified as the most valued aspects of the area with 83.6% of respondents indicating this category for each followed closely by the productive agricultural environments (82.9% of respondents with similar weightings for male and female), the people and community (80.8% of respondents with 72.9% for males and 90.3% for females) and soil health (78.1% of respondents with 80.0% for males and 75.% for females). Tourism opportunities ranked as the least supported aspect with only 50.0% and was ranked lowest.

"Be active in all catchment areas, not just projects in specific areas"

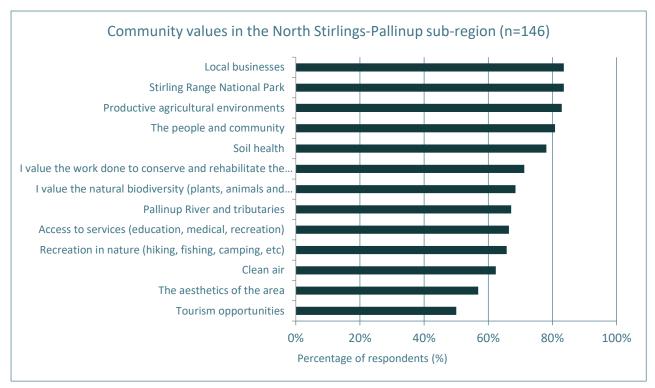


Figure 19: Community values in the North Stirling-Pallinup area (n=146).

Not surprisingly, the respondents who indicated they worked in agriculture ranked productive agricultural environments highest (87.6% respondents) followed by soil health (83.8%), local businesses (82.9%) and the people and community (79.0%) and again, tourism was ranked lowest (44.8%). Respondents from other industries indicated the Stirling Range National Park as the highest (96.9%), followed by the people and community (87.5%), local business (84.4%) and recreation in nature (81.3%) with soil health ranking much lower when compared to the full data set at 62.5% of other industry respondents.

In indicating the level of concern, respondents were "extremely concerned" in relation to quality/ quantity of drinking/ stock water (37.7% of respondents) followed by wind/ water erosion (34.9%), soil salinity (34.2%), maintaining ground cover (29.4%) and pest animals (29.4%) as shown in figure 20. In combining "somewhat concerned" with "very concerned" and "extremely concerned", pest animals (98.6%), wind/ water erosion (98.0%) and quality/ quantity of drinking/ stock water (96.6%) ranked highest. The greatest proportion of "not at all concerned" was for flooding (28.0%) followed by pesticide and fertiliser use (17.2%). Other concerns noted by respondents and reproduced here for interest included: use of baiting to control feral animals, lack of winter rainfall, trees disappearing along roadsides (between Ongerup and Borden), limited prescribed burns, roadside weeds and litter, on farm bush health, rubbish tips and lack of recycling facilities, fuel load in bush around Ongerup townsite, increased levels of bridal creeper, flood damage to waterways, rabbits and clearing without community consultation (i.e. clearing for tip).

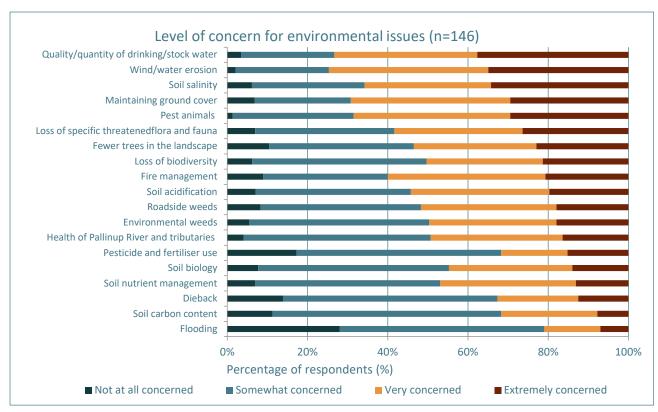


Figure 20: Level of concern for environmental issues (n=146).

When considering the level of concern for environmental issues of agricultural respondents (Figure 21), they were extremely concerned about the quality/quantity of drinking/stock water, water/wind erosion and soil salinity. In combining "somewhat concerned", "very concerned" and "extremely concerned", the highest-ranking concerns for agricultural respondents were pest animals, quality/quantity of drinking/stock water, and health of the Pallinup River and tributaries.

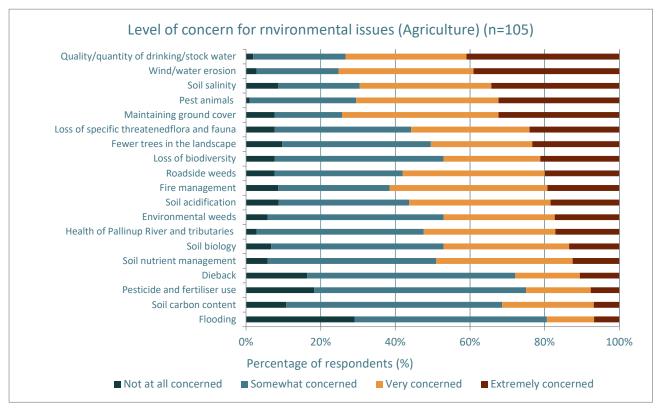


Figure 21: Levels of concern for environmental issues (Agriculture) (n=105).

In contrast, when considering the level of concern for environmental issues of other industry respondents (Figure 22), they were extremely concerned about soil salinity, pesticide and fertiliser use and loss of specific threatened flora and fauna. In combining "somewhat concerned", "very concerned" and "extremely concerned", the highest-ranking concerns for other industry respondents were wind/water erosion, soil salinity, loss of biodiversity and pest animals.

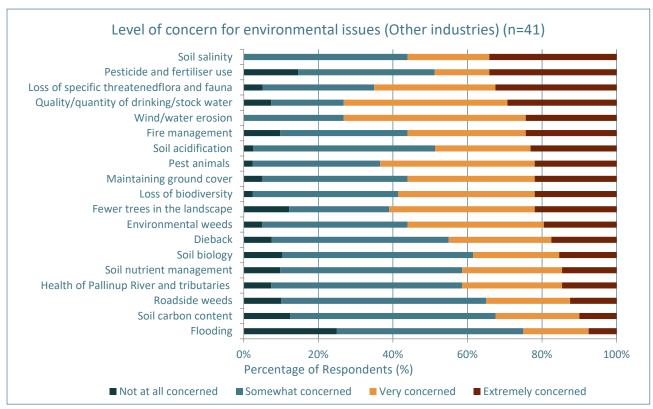


Figure 22: Level of concern for environmental issues (Other industries) (n=41).

Respondent thoughts on climate change theory identified that the majority of respondents felt that climate change is occurring and is human induced (46.2% of respondents) followed by I am uncertain (27.3%) as shown in figure 23. When comparing gender thoughts on climate change, a greater proportion of females felt that climate change is occurring and is human induced (53.6%) when compared to men (37.1%). Agriculture and other industries also ranked climate change is occurring and is human induced as the most supported statement (46.6% of agriculture respondents and 43.8% other industries respondents).

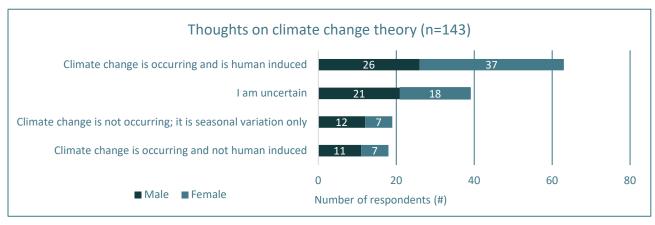


Figure 23: Thoughts on climate change theory (n=143).

Figure 24 indicated respondent sentiment to a range of climate change statements. Greater than half of the respondents either "agreed" or "strongly agreed" with the following statements, in order of combined total percentage of respondents:

- 1. I am concerned about the potential impacts of climate change/ seasonal variation on regional agriculture: 77.9%. Note: this statement grouped climate change with seasonal variation which in the authors opinion (J. Tomlinson) could be misleading as the two, in her opinion, are not mutually exclusive and the results could be misconstrued to indicate support for climate change theory. Caution is advised when interpreting this data.
- 2. Farmers should take additional steps to protect their land from increased climate change/ seasonal variation: 75.9% of respondents
- 3. I am concerned about the potential impacts of climate change on my farm operation/ place of work: 69.2%.
- 4. I believe that extreme weather events will happen more frequently in future: 67.8%.
- 5. Farmers should increase investment in mitigating climate change/ seasonal variation to mitigate its effect: 56.6%.

A marked decrease in positive sentiment was noted with the statement "Climate change is not a big issue because human ingenuity will enable us to adapt to changes" with only 15.1% of respondents indicating agree/ strongly agree, as show in figure 24. These proportions were relatively similar when the agricultural industry responses were analysed in comparison to other industries, although agricultural respondents did more strongly agree with the statement relating to potential impacts on farm operations/ place of work (41.0%) and regional agriculture (40.0%).

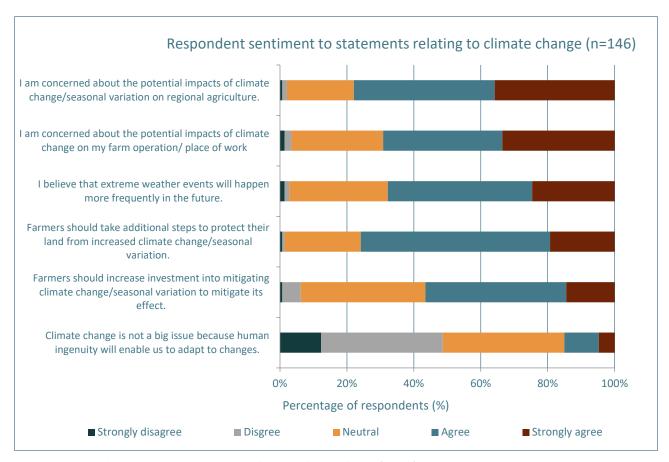


Figure 24: Respondent sentiment to statements relating to climate change (n=146).

NSPNR Operations

Of the services and activities that NSPNR currently offers, the service that the greatest percentage of all the

This section provides information relating to NSPNR operations, including services and activities and communication.

respondents said they would use in the future was works to conserve the region's biodiversity (77.8% of respondents) followed by agricultural demonstrations and innovations (71.8%). The least supported services and activities currently offered were assistance with funding submission preparation (62.6%) and community education e.g. school visits (61.6%) as shown in figure 25.

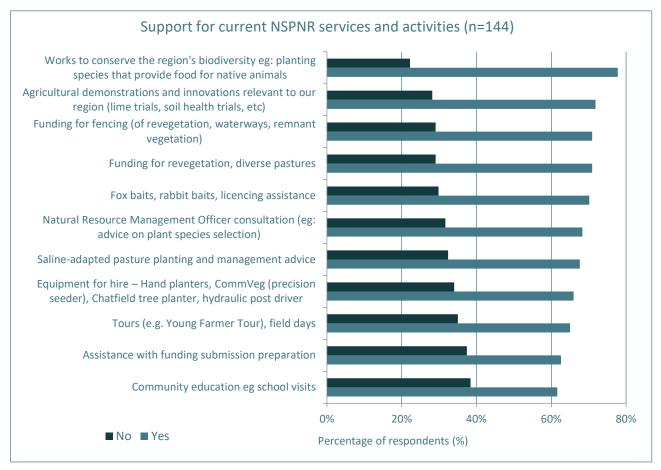


Figure 25: Support for services and activities currently offered by NSPNR (n=144).

Agriculture respondents more strongly indicated support for services currently offered by NSPNR (Figure 26). Of those respondents who identified as being in other industries (Figure 27), they were more likely not to use



the current services offered by NSPNR in the future. Works to conserve the region's natural resource assets and community education were highly ranked highest by respondents who identified as other industries.

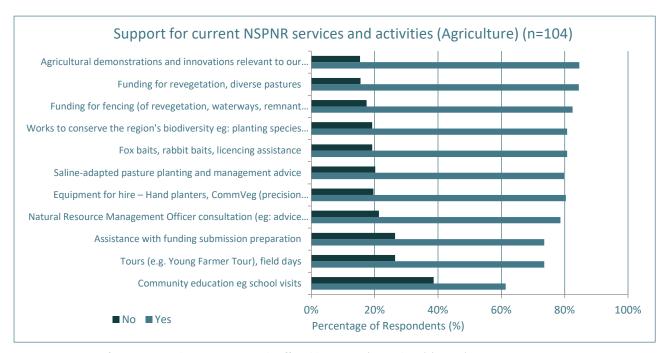


Figure 26: Support for services and activities currently offered by NSPNR (Agriculture) (n=104).

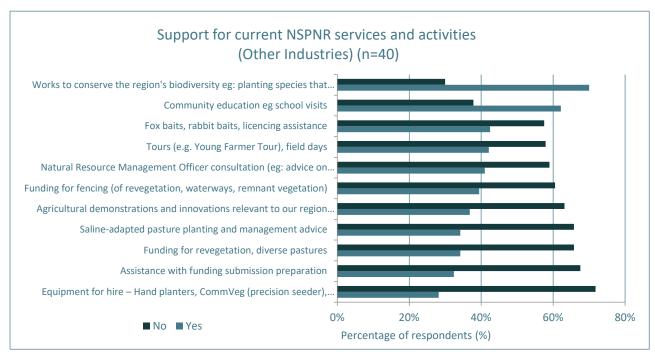


Figure 27: Services and activities currently offered by NSPNR (Other industries) (n=40).

In relation to potential future/ additional services and activities (Figure 28), respondents most wanted NSPNR to work towards delivering coordinated regional control of pest weeds / animals (90.2% of respondents) and groundwater monitoring (88.2%). The least supported potential future services and activities were greenhouse gas reduction, carbon sequestration information (62.2%) and farm planning (67.9%).

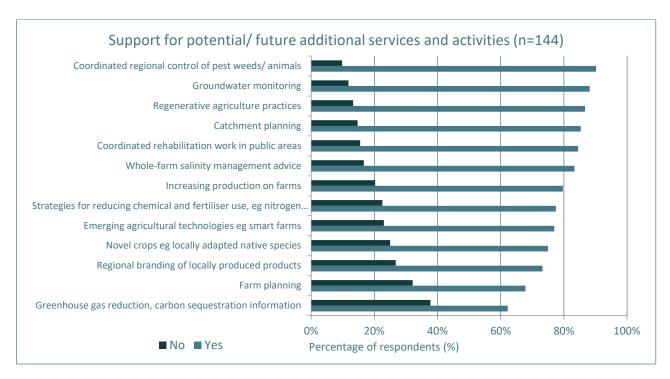


Figure 28: Activities and services that NSPNR should work towards delivering in the future (n=144).

The most popular activity that agricultural respondents would like NSPNR to work towards (Figure 29) was coordinated regional control of pests (90.4% of respondents), followed by groundwater monitoring (88.5%) and catchment planning (85.4%). The least popular activity that agricultural respondents would like NSPNR to work towards was greenhouse gas reduction/ carbon sequestration information (61.5%), followed by farm planning (64.4%).

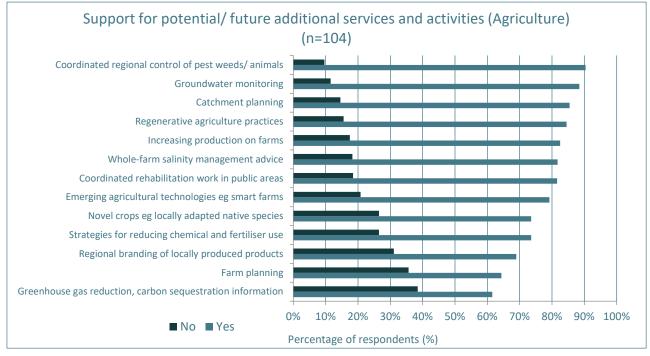


Figure 29 Activities and services that Agriculture respondents woud like NSPNR to work towards delivering (n=104)

For respondents in other industries, the services and activities they would most like NSPNR to work towards delivering in the future were regenerative agricultural practices (92.5% of respondents) and coordinated rehabilitation work in public areas (92.3%) as shown in figure 30. The least popular were greenhouse gas reduction/ carbon sequestration information (64.1%) and emerging agricultural technologies e.g. smart farms (71.1%).

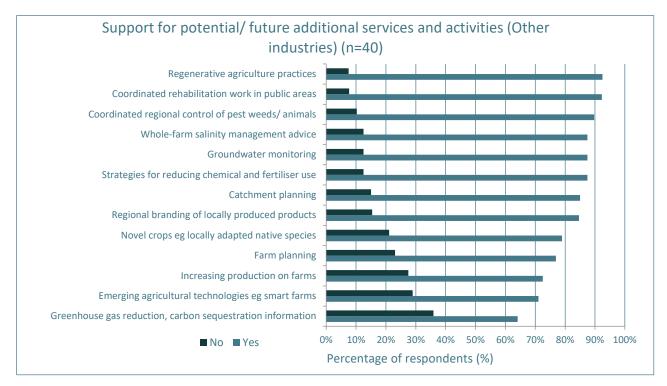


Figure 30: Activities and services that other indusry respondents would like NSPNR to work towards delivering (n=40).

The survey sought to gauge the level of support for volunteering to support NSPNR and its activities across the sub-region. There was moderate interest in volunteering (Figure 31) whereby 49 respondents completed the question "Would you be interested in volunteering to assist with any of the following?". Of the 49 respondents, 69.4% were willing to volunteer to assist with on-ground activities, 47.0% responded that they were willing to host a field day on their property and 24.5% were willing to assist with group management, as shown in figure 31.

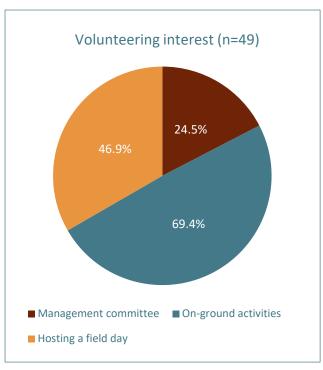


Figure 31: Indications of volunteer interest (n=49).

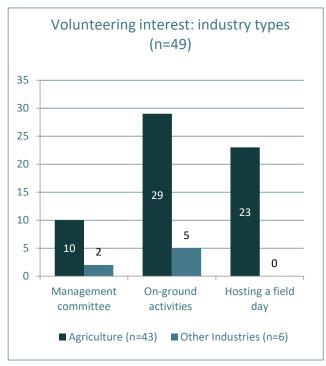


Figure 32: Volunteering interest from industry type (n=49).

Those who were interested in volunteering were predominately from agriculture (43 of 46 respondents) with six responses from other industries (Figure 32).

There were five comments received about volunteering with NSPNR. Three indicated they were not interested in volunteering with NSPNR, and two suggested alternative volunteering activities: addressing roadside rubbish / weeds and collaborating with public community projects.

There was strong support from the respondents for the NSPNR newsletter (Figure 33) with 61.5% (62.8% of agriculture respondents and 59% of other industries) of respondents indicating they would like to receive the newsletter.

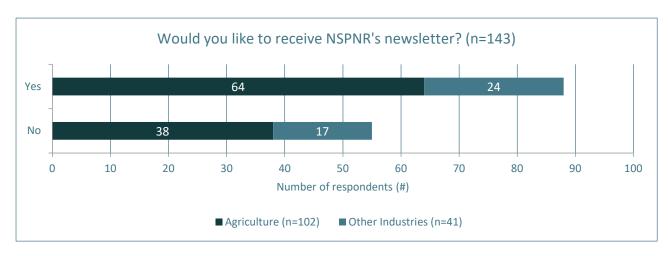


Figure 33: Respondent interest in receiving NSPNR's newsletter by industry (n=143).

Communication preferences for all respondents were captured and are shown in figure 34 with email being the most preferred information source (62.2% respondents), followed by community newsletters (56.6%) and field walks / field days (47.6%). Email and community newsletters were popular with the older age brackets, while <20 year old's preferred Twitter (three of five respondents) or Farm Weekly / Countryman (three of five respondents) and the 20-29 age bracket preferred Facebook (56.7% of respondents), email (53.3%) and field walks/field days (53.3%).

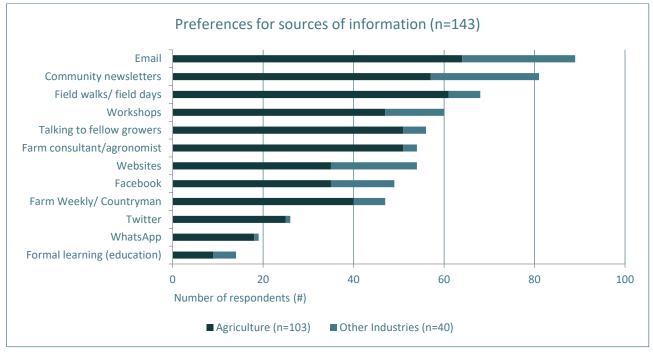


Figure 34: Responses to the question "How do you prefer to access information?" (n=143).

Discussion and recommendations

The 2020 NSPNR Your Region, Your Input Community Survey successfully engaged with the community to provide valuable and representative input into the upcoming NSPNR strategic planning process. The survey will further provide useful information to guide NSPNR operations now and into the future. It is important to note that the survey was open to the entire community with over 75% of respondents being involved in agriculture, being the region's main landuse.

Awareness and performance of NSPNR

There is high level of awareness of NSPNR in the community and the group is strongly recognised as a Landcare group, particularly in the Borden and Ongerup areas. Awareness of the Pallinup Landcare Centre was slightly lower and just slightly less than half of the respondents acknowledged NSPNR as a grower group which encourages discussion about the key focus of the group going forward.

The location of the NSPNR operating premises could be further explored in consideration of the slightly lower levels of awareness of the Pallinup Landcare Centre. Is having two names associated with the group confusing to the audience? Will a "shop front" be relevant to the group in the future some other factor? Is awareness of the operating premises strategically important, particularly in consideration of the group's future services and activities?

In terms of performance across a range of areas, there is room for improvement for NSPNR. Feedback from "customers" is important and should be considered as constructive criticism. The group must consider this feedback in line with their known capacity and capability (suggest a skills matrix) and their identified weaknesses to develop actions to increase the performance of the group. Setting key performance indicators for the group and operational staff should be considered to enable monitoring and evaluation processes to keep the group accountable to their strategy. The high level of 'not sure' responses to performance are likely the result of respondents who have not engaged with NSPNR as either a member or user of services and activities. There are clear indications throughout the findings that NSPNR could communicate better.

Membership

There is clearly an opportunity to grow membership across the sub-region; however, membership should be considered as a 'two-way street' and the group needs to be mindful of the costs of its membership program. Available capacity and resources of NSPNR will impact on any potential membership drive and the ability to deliver on membership promises. Conversely, investment generated through memberships could provide resources to support core business. It would be interesting to investigate the membership trends over time



and review the membership model going forward. It will be useful to compare the different models of similar groups (i.e. the Ravensthorpe Agricultural Initiative Network Inc. do not charge for membership, the whole community are provided complimentary membership) as part of this review.

A membership review should consider factors such as:

- Competition for memberships from other Landcare/ natural resource management/ catchment groups and grower groups,
- Membership benefits and appropriateness to the wider community and the demographics of the community (i.e. age ranges). What is the value proposition?
- Assess current membership demographics, does it have diversity?
- What are the benefits of membership?
- Fee for service model versus membership?
- What value is membership to NSPNR?

RECOMMENDATION 1: Review past membership trends and evaluate likeminded group membership programs prior to reviewing the current NSPNR membership model.

Community values and concerns

The North Stirlings-Pallinup community values a range of environmental, social and economic aspects of the sub-region with local businesses, the Stirling Range National Park, productive agricultural environments, the people and community and soil health all being indicated highly by respondents. With the agricultural industry being highly represented in the sample, the higher valuing of productive landscape and soil was probable and given the group's history of Landcare, the high value placed on the value of conservation works, biodiversity and waterways was also probable. These shared values for the environment and economic

"NSPNR's effort provides great benefits to our community"

activity reflect the current focus of NSPNR; "to drive better management of natural resources resulting in social, economic and environmental sustainability". It was interesting that tourism opportunities ranked the

lowest in terms of values, however that is likely a result of the survey's focus being on natural resource management rather than regional development.

Concerns for the environment were strongly focused around agricultural production issues and issues impacting biodiversity (pest animals, species and biodiversity loss) which flows on from the high values of productive agriculture and environmental values, again a likely finding given the sample and the group's historic focus. The findings highlighted the 2018-2020 drought symptoms with concerns around water security and erosion and correspondingly, flooding was less of a concern at the time of this survey. Interestingly, some of the services provided by NSPNR do not cover these priority concern areas identified i.e. water testing/ analysis/ guidance and information. Importantly, the larger regional issue of soil salinity was a large concern for the respondents, as was maintaining ground cover, with the two being inextricably linked. There was also strong support for groundwater monitoring, catchment planning (and farm planning



to a lesser extend) and whole-farm salinity management advice in the potential future services and activities. NSPNR will be well placed to coordinate catchment-wide efforts in this area, however, capacity (staff support for on-ground works) and technical ability/ resources will be required; a collaborative approach will be needed for many reasons, but especially due to scale.

With regards to climate change, the survey sought to value-add to existing and complimentary research being undertaken in the sub-region and to provide NSPNR staff with an insight into the community's sentiment around climate change theory. The findings should be considered alongside this more detailed research. Essentially, there is an indication of agreement with the theory of human-induced climate change and the community are concerned about the potential impacts and believe action should be taken. It would be interesting to compare the North Stirlings-Pallinup findings to current and previous regional community sentiment relating to climate change to assess changes in opinion over time.

RECOMMENDATION 2: Consider the climate change findings of this survey alongside the information produced in the complimentary study and more broadly, as well as consider how sentiment may be changing over time when determining future services and activities.

NSPNR operations

There was support for the range of current services and activities, however, there did appear generally to be a greater level of support for the potential future additional services and activities when compared to the current services and activities. Given capacity and funding constraints, it makes sense to priorities those activities/ services that were popular with the respondents who will use them.

Projects could be developed around agricultural demonstrations and innovations and the group should continue to pursue funding for revegetation, fencing and works to conserve biodiversity. In relation to community education, while low on the priorities for agriculture respondents, it was the second most popular for other industries so should feature in group activities, especially in recognition of previous work in this area with schools.

RECOMMENDATION 3: Investigate what capacity/ funding opportunities there might be to develop a community education program involving the local schools and the Pallinup River and tributaries and Stirling Range National Park.

RECOMMENDATION 4: Continue with the current offering of projects / services, particularly looking out for demonstration opportunities.

Coordinated regional control of pests (feral animals and environmental weeds) was popular for the agricultural respondents and provides for positive environmental and economic outcomes. As this is something NSPNR is currently involved in, this work should continue and be increased.

RECOMMENDATION 5: Investigate opportunities to reinforce and broaden current offering of pest animal (foxes/rabbits) and weed control.

In terms of services and activities that NSPNR could deliver in the future to mitigate climate change and reduce its potential impacts in the sub-region, the survey found that there was strong support for the group to deliver services and activities in line with regenerative agricultural practices; "a farming system concept that seeks to define the way modern agriculture can transition to becoming truly sustainable" (SWCC, 2020). More generally, support for future services and activities all pointed towards continual improvement in natural resource management. Interestingly, greenhouse gas reduction and carbon sequestration information were the least supported of the proposed future activities (62.2% of respondents).

Interestingly, other industry respondents highly supported NSPNR providing services and activities around regenerative agriculture perhaps because rather than being directly involved in that activity themselves (as they are not in agriculture), that they believe it is an appropriate activity for NSPNR to be involved in, in the future. Generally, support for services and activities in relation to regenerative agriculture was high (86.7% of respondents) so it is likely worth pursuing.

RECOMMENDATION 6: Develop and seek support for a locally delivered regenerative agricultural research and demonstration project to enable local assessment of the concept.

Respondents were interested in knowing more about the state of the environment. The South Coast Snapshot provides an indication of the state of the environment and coupled with locally developed data (i.e. from NSPNR's own monitoring), there may be an opportunity to present and disseminate information to the wider community seeing this is an area that NSPNR can do better in. The challenge with the project cycle loop is to ensure projects and the organisation identify that monitoring and evaluation is critical to showing the degree of impact that the group is having. A further challenge is that ongoing monitoring and evaluation is not supported and core funds currently for groups such as NSPNR are very tight.

RECOMMENDATION 7: Seek support for longer term monitoring and evaluation of real environmental impact. NSPNR identify a range of environmental indicators for monitoring and evaluating impact. Resourcing of this is crucial and communication is ideal to ensure stakeholders are aware of the group's real effectiveness.

Several respondents indicated that they would like to be involved in volunteering (particularly respondents in agriculture). All offers should be investigated. Management Committee succession will benefit from engaging with people who are interested in assisting with group management. Again, a skills matrix will be useful to ensure the Management Committee has appropriate diversity for effective governance. It was interesting that the respondents from other industries wanted more conservation activities to be completed but that the corresponding levels of volunteering were low. This may require further investigation, however, there are opportunities to work with agriculture as the primary stakeholder with the stronger support shown in this industry. The volunteer base will always be important to consider when determining activities of the group given it is community led. It may be possible to partner with local government around a local volunteer register to promote the volunteering opportunities locally, being sure to have the projects ready and in front of them.

RECOMMENDATION 8: Contact survey respondents who indicated that they would like to be involved with NSPNR as a volunteer.

RECOMMENDATION 9: Consider the development of a register of volunteers and collaborating with the broader community about volunteering.



With salinity identified as a high concern for the region and groundwater monitoring, catchment planning and whole-farm salinity management advice identified as highly supported future services and activities, there is clear indication that the community require assistance in this area. Interestingly however, support for farm planning was significantly lower and reasons for this should be sought to be understood.

RECOMMENDATION 10: Work to seek support for the reinstatement of catchment wide groundwater monitoring (Note: It is recommended that the group make direct contact with the WA Minister for Agriculture in relation to this item. There are several groups who share these concerns).

RECOMMENDATION 11: Work to seek support for catchment planning.

RECOMMENDATION 12: Work to seek support for saltland management.

The interest areas for current and future services and activities need to be matched with values and concerns, as well as the capacity and capability of the group and the community to support them. Communication will be critical to ensure maximum engagement to enable on-ground outcomes. The interest in future services and activities will give rise to the question about the future focus of the group.

Communications

The survey provides clear evidence that respondents feel that more needs to be done to increase the communication and promotion of NSPNR. They do not know enough about NSPNR and its activities, and they do not know what NSPNR membership offers. Respondents also wanted to know more about the state of the environment. There is currently limited capacity and resources available to NSPNR for broadscale communication, education, promotion and marketing which is impacting on the organisation's profile in the community and may impact on the group's effectiveness in achieving its strategic ambitions and delivering its services and activities.

The NSPNR have a Marketing Plan; created in 2017 and endorsed by the Management Committee in 2018 (NSPNR, 2018). This document should be reviewed for currency and updated following the strategic planning process considering the survey's findings and the NSPNR strategic plan. The update should ensure that the marketing plan identifies and actions opportunities to promote NSPNR activities and membership benefits. It could further use a calendar to leverage from i.e. Science Week, National Tree Day and find ways to promote NSPNR and its activities that are not overly costly or time-consuming. The important thing to be mindful of when it comes to communications is that that there is a lot of information out there and it comes from a variety of sources. NSPNR need to be aware of the communities and its segments communication preferences and establish/ promote their point of difference in the market as well as ensure that they are being seen in all relevant mediums.

As part of effective project management, a dedicated project or activity communication plan should be developed. The Marketing Plan provides a template for this.

RECOMMENDATION 13: NSPNR develops and implements a comprehensive communication and engagement plan by updating the plan that is an attachment to the Marketing Plan.

RECOMMENDATION 14: All NSPNR projects and larger activities have a dedicated communication plan developed during project development or at the project's onset.

In terms of communication tools, clearly email and newsletter is working well, as are field days and workshops so these should continue. For members to see more value in the group, it is possibly worth considering the information that is being disseminated to members via these processes and mediums. Obviously, value will increase if information is hitting the mark with the needs of the members. Field days and opportunities for growers to learn from each other are extremely popular in agriculture and effective in

knowledge transfer. These ranked highly with respondents and NSPNR performs well in this area so these should be maintained.

RECOMMENDATION 15: Continue to use MailChimp as primary way to provide information with key messages backed up with other communication mediums.

RECOMMENDATION 16: Incorporate additional interest received in the NSPNR newsletter into current mailing lists.

Communication expenses should be built into all projects. Core communications (not funded by projects) need to be funded from alternative sources and the group will need to identify these sources.

RECOMMENDATION 17: Look at ways that NSPNR can allocate additional capacity to communications activities so that NSPNR and its services and activities can be promoted adequately.

Future focus of NSPNR

The survey provides some clear direction in terms of focus for the group as presented in the findings and the discussion. In determining the focus of the group, the group will likely consider what "type" of group they are, although rather than trying to fit a mould or definition, NSPNR has the opportunity to position and define itself to suit the needs of the local environment and community; the survey findings will assist with this. That said, some key attributes of Landcare groups and grower groups have been inserted into Table 1. There are many similarities between grower groups and Landcare groups with the key difference being either an environmental or on-farm production focus. In determining its future focus, NSPNR will need to consider what they can do (and do well!) and what they cannot, or should not, do. Resourcing, capability and capacity all need to be taken into account, as well as the community needs and concerns as identified in this report. Collaboration opportunities should be explored; however, risk management will be important to ensure NSPNR maintains its local focus and connection.

Table 1: Landcare and grower group attributes.

Key attributes of Landcare groups

"Landcare is a grassroots movement of individuals and groups with a shared vision to restore and protect the environment in their local community through sustainable land management and conservation activities." (Landcare Australia, 2020)

- Community centred and volunteer driven.
- Strong partnerships and collaborations.
- Typically, not-for-profit, incorporated associations.
- Many have a history of Land Conservation District Committees in WA.
- Many have long histories.
- Also referred to as natural resource management groups or catchment groups.
- Usually supported through government grant programs through projects.
- Usually have smaller membership fees.
- Typically, the area of operation is aligned with catchments/ sub-catchment areas.

Key attributes of grower groups

WA grower groups "generally aim to increase the production and profitability of their members farm businesses through the adoption of new production technologies, and delivery of locally relevant research, development and extension, while providing a social hub supporting participatory research and farmer-to-farmer learning." (Grower Group Alliance Inc., 2020)

- Farmer centred and volunteer driven.
- Strong partnerships and collaborations.
- Typically, not-for-profit, incorporated associations.
- Typically formed to focus on an issue and then typically have expanded from that i.e. SEPWA.
- Many have long histories.
- Also referred to as farming systems groups.
- Usually have industry sponsorship programs and access funding for projects from a range of sources.
- Membership fees are generally slightly higher.
- Area of operation is not necessarily based on catchment areas.

NSPNR need to ensure that its future core business is in line with community values and concerns, to a degree. Remember that the broader community that are not involved in group governance and operations are not aware of the limitations of the funding programs.

There is a difference in values for agriculture versus other industry respondents. Given 76% of respondents were from agriculture, it is the main landuse in the area and there are strong indications for support for the group from this industry, it is recommended that agriculture be the primary stakeholder and one of the key audiences for the group.

Conclusion

The discussion and recommendations provided herewith are not exhaustive. The NSPNR Management Committee and staff are encouraged to reflect on the findings with their own world view to draw out further discussion items as the group embark on setting the course for natural resource management in North Stirlings-Pallinup. The survey findings should be considered as pre-work in the strategic planning process. The strategic planning workshop will layer the more detailed knowledge of the groups governance and operations over the survey findings to ensure that future strategy is measured, realistic and grounded to ensure the long term success of the group and its outcomes.



References

Australian Bureau of Statistics. (2020, August 20). 2016 Census QuickStats - Broomehill East. Retrieved from Australian Bureau of Statistics:

https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/SSC50191?opendocument

Australian Bureau of Statistics. (2020, August 20). 2016 Census QuickStats - Gnowangerup. Retrieved from Australian Bureau of Statistics:

https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/LGA53640

Australian Bureau of Statistics. (2020, August 20). 2016 Census QuickStats - Gnowellen. Retrieved from Australian Bureau of Statistics:

https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/SSC50563?opendocument

CheckMarket. (2020, August 26). *Sample Size Calculator*. Retrieved from Checkmarket: https://www.checkmarket.com/sample-size-calculator/

Department of Agriculture, Water and Environment. (2020, August 20). *Australian Heritage Database; Stirling Range National Park*. Retrieved from Department of Agriculture, Water and Environment: https://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;place_id=105818 Accessed 19/8/20

Grower Group Alliance Inc. . (2020, August 26). *What is a grower group?* . Retrieved from Grower Group Alliance Inc. : http://gga.org.au/what-is-a-grower-group/

Landcare Australia . (2020, August 26). *What is Landcare*. Retrieved from Landcare Australia : https://landcareaustralia.org.au/what-is-landcare/

NSPNR. (2018). *North Stirlings Pallinup Natural Resources Inc. Marketing Plan.* Albany: South Coast Natural Resource Management Inc.

NSPNR. (2020). *Report to the Shire of Gnowangerup 2018-2019.* Borden: North Stirling Pallinup Natural Resources Inc.

SCNRM. (2016). South Coast Snapshot. Albany: SCNRM.

Shire of Broomehill-Tambellup . (n.d.). *Shire of Broomehill-Tambellup Strategic Plan.* Shire of Broomehill-Tambellup .

Shire of Gnowangerup . (2017). *Strategic Community Plan 2017-2027.* Gnowangerup: Shire of Gnowangerup .

SWCC. (2020). *Final Report: Supporting farmers to make the transition to regenerative agriculture.* Bunbury: South West Catchments Council Inc.

Appendix I

Key communication tools.



