



Pop-up! Developing and delivering short-notice marine volunteering events in Port Phillip Bay/Nerm

Available online at vnpa.org.au/publications/pop-up

Author: Kade Mills Production: Paul Clifton Cover image: Kade Mills

VICTORIAN

Published by Victorian National Parks Association (VNPA)

ABN 34 217 717 593

Wurundjeri Country, Level 3, 60 Leicester St, Carlton VIC 3053 (03) 9341 6500 vnpa@vnpa.org.au vnpa.org.au

President: Marilyne Crestias Executive Director: Matt Ruchel



This title is published under Creative Commons BY NO ND CC BY-NC-ND 2.0. All text and images ©VNPA

2025 unless stated. Content may be quoted without permission provided that acknowledgement is made.



The Victorian National Parks Association (VNPA) is an effective and influential nature conservation organisation.

We work with local communities, scientists and government to advocate for evidence-based policy to safeguard wildlife, habitat and protected areas. We inspire connections with nature through citizen science, activities, action and education for all Victorians.

We've led the creation, oversight and defence of Victoria's natural estate for over 70 years.



ReefWatch is VNPA's marine citizen-science program. It runs the Great Victorian Fish Count and the Sea Slug Census. ReefWatch trains people to collect important information about fish, invertebrates and algae at locations across Victoria.

VNPA acknowledges the many First Peoples of the area now known as Victoria, honours their continuing connection to, and caring for, Country, and supports Traditional Owner joint-management of parks and public land and waters for conservation of natural and cultural heritage. We offer our respect to Elders past and present.

Contents

Exe	ecutive summary	3
1. Iı	ntroduction	3
2. B	Baseline survey	5
2.1	Marine activity patterns	
2.2	Volunteering history and behaviour	
2.3	Availability and event preferences	
2.4	Communication preferences	
2.5	Summary: insights shaping the pop-up model	
3. P	Pop-up event model design	7
3.1	Planning a pop-up event	
4. I	mplementation of pop-up events	7
5. P	Participant feedback	8
6. A	analysis: Effectiveness of the pop-up model	8
6.1	Attendance	
6.2	Participant diversity	
6.3	Weather and operational efficiency	
	ecommendations for future pop-up marine	
v	olunteering	9
7.1	Scheduling considerations	
7.2	Notice period	
7.3	Preferred times of day	
7.4	Communication channels	
7.5	Event types suitable for rapid deployment	
7.6	Integrating pop-up events with scheduled programs	
	How other community and environmental groups car the pop-up model	٦
8. 0	Conclusion	10
App	oendix 1: Baseline survey	11
Apı	pendix 2: Event details	11

This report was funded by the Victorian Government through the Port Phillip Bay Fund



Executive summary

ReefWatch trialled a series of short-notice ('pop-up') marine volunteering events to improve participation, diversify engagement, and reduce the number events cancelled due to unfavourable weather conditions.

The model leveraged flexible scheduling, favourable weather windows, and streamlined communications to test whether rapid-deployment events could complement existing ReefWatch programs.

Attendance across the 18 events was strong, with an 87% participation rate – higher than typical ReefWatch attendance, where no-shows range from 20–50% depending on the activity. This indicates well-timed, weather-responsive events can improve engagement, particularly among people who are unable to attend traditional weekend activities.

Participant demographics reflected the usual wide crosssection of the community while also attracting newcomers who joined because events were offered at more suitable times. Consistently good weather improved safety, reduced planning stress, and fostered stronger social connection at events.

Clear communication workflows, effective risk management, and pre-prepared templates contributed to efficient delivery.

Overall, the findings demonstrate that pop-up events are a valuable addition to ReefWatch's program delivery. They provide flexible, high-quality, and engaging opportunities for the community and reduce cancellations. The model can be used by other organisations seeking to build community engagement through timely and responsive programming.



Getting ready to take part in the Great Victorian Fish Count, Rye Pier, Bunurong Country Kade Mills

1. Introduction

For more than two decades, ReefWatch has delivered marine volunteering events across Port Phillip Bay/Nerm and Victoria. Many of these scheduled activities have been disrupted, cancelled, or rescheduled due to unfavourable weather and water conditions – challenges widely shared across environmental, outdoor, and community-based programs.

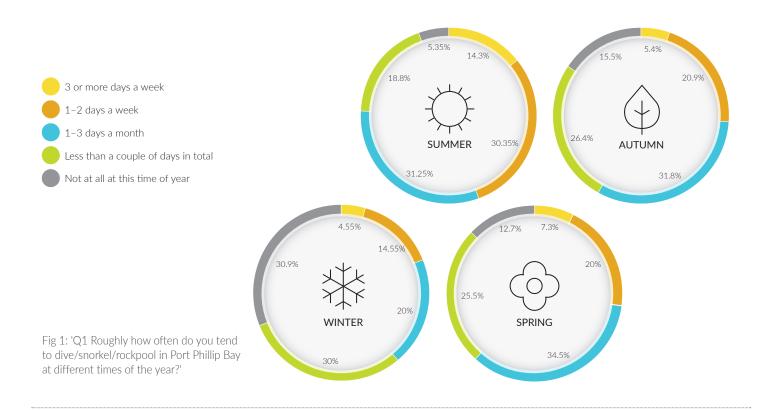
Traditional event scheduling, often set months in advance and typically on weekends, offers limited flexibility in responding to rapid changes in weather. To address this, ReefWatch tested whether a short-notice, weather-responsive model could provide a more reliable and efficient alternative.

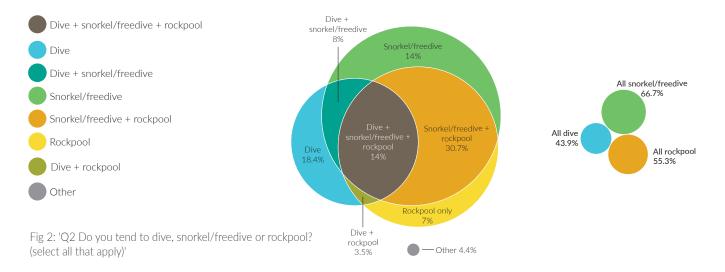
Prior to the trial, ReefWatch surveyed the marine community – including divers, snorkellers, and rockpoolers – to understand activity patterns, volunteer history, availability, and

communication preferences. These insights directly influenced the design of the pop-up events, particularly regarding timing, notice periods, and the communication tools used to alert participants.

Beyond ReefWatch, this project also explored the potential for a pop-up model to support other community-engagement organisations. Conservation groups, Friends networks, Councils, outdoor education programs, and citizen science initiatives face similar challenges around weather dependency, volunteer availability, and resource limitations.

The ReefWatch pop-up model offers a practical framework for improving attendance, reducing cancellations, diversifying participants, and strengthening community-centred program delivery.





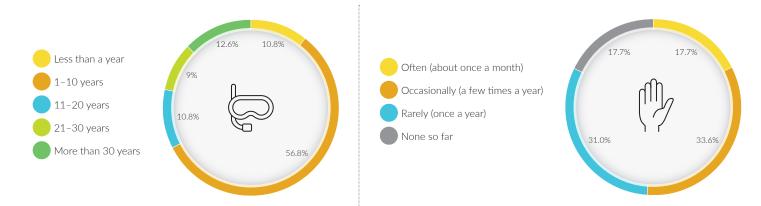


Fig 3: 'Q3 How many years have you been diving/snorkelling/rockpooling in Port Phillip Bay (roughly)?'

Fig 4: 'Q4 How often do you participate in volunteering activities in the marine environment?'

2. Baseline survey

A baseline survey (Appendix 1) was circulated to the ReefWatch mailing list on multiple dates across late 2023 and early 2024 and shared on Facebook. Across all channels, 115 people contributed responses.

2.1 Marine activity patterns

People reported visiting Port Phillip Bay/Nerm to dive, snorkel, or rockpool most frequently in summer, with activity decreasing in winter and remaining steady through spring and autumn (Fig 1 – Q1).

Snorkelling was the most popular activity overall, followed by rockpooling and then diving, with only a small percentage of respondents not taking part in any of these (Fig 2 – Q2).

Experience levels were diverse: most had been active for 1–10 years, while over 30% reported more than a decade of experience, including 13% with 30+ years (Fig 3 – Q3).

2.2 Volunteering history and behaviour

Most respondents had participated in marine volunteering at least occasionally, with only 17% reporting no involvement at all (Fig 4-Q4).

Citizen science was the most common type of activity undertaken, followed by marine debris clean-ups, and nearly 40% had taken part in pest removal events (Fig 5 – Q5). More than 60% of respondents had experienced a volunteering

event being cancelled (Fig 6 – Q15), with weather being the overwhelmingly dominant cause (95%), followed by poor water quality (27%) (Fig 7 – Q16).

2.3 Availability and event preferences

Weekends were the preferred days for volunteering, with Sunday (60%) slightly edging out Saturday (59%), and many respondents indicating that their availability varies (58%). During the work week, Friday was the most preferred day (18%), while Monday and Thursday were the least preferred (10% each) (Fig 8 – Q10).

Most respondents (85%) said they would consider attending marine volunteering activities during the week (Fig 9 – Q11). Morning was the most preferred time window (65%), with early mornings the least preferred (49%), while afternoons and evenings were favoured in similar proportions (59% and 57%) (Fig 10 - Q12).

Over half of respondents were willing to travel up to 90 minutes for an event, and more than a quarter were willing to travel even further; all were comfortable travelling at least 30 minutes (Fig 11 – Q13).

In terms of notice, over 60% required at least a week, with the largest group (32%) needing 10 days or more, while the rest could attend on shorter notice, including 20.83% who were available with three days or less (Fig 12 – Q14).

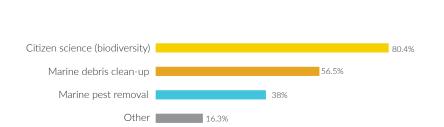


Fig 5: 'Q5 What volunteering activities have you done in the marine environment? (select all that apply)' $\,$



Fig 6: 'Q15 Have you ever registered to attend a marine volunteering event that ended up being cancelled?'

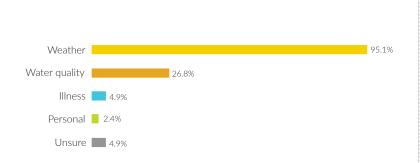


Fig 7: 'Q16 Why was the event cancelled?'

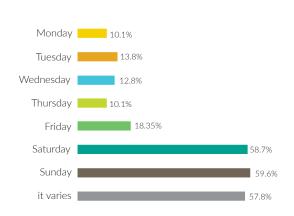


Fig 8: 'Q10 What are your preferred days to volunteer?'

2.4 Communication preferences

Respondents currently learn about marine volunteering opportunities mostly through email (72%) and Facebook (67%), with word of mouth also playing a significant role (59%). Instagram (18%), X (2%), and LinkedIn (0%) were far less common sources (Fig 13 – Q8).

When asked how they would prefer to receive information, email emerged as the clear favourite (90%), followed by Facebook (68%). Word of mouth (45%) and Instagram (30%) were also preferred by some, while LinkedIn (4%) and X (3%) remained the least favoured options (Fig 14 – Q9).

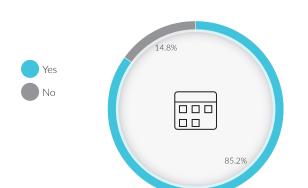


Fig 9: 'Q11 Would you consider attending marine volunteer activities during the week (Mon–Fri)?'

2.5 Summary: insights shaping the pop-up model

Survey results confirmed strong potential for a pop-up model by showing:

- high levels of existing activity in Port Phillip Bay/Nerm
- strong openness to weekday participation
- willingness to travel considerable distances
- broad comfort with shorter notice periods
- clear preference for email and Facebook communication

These insights directly informed the model's design, especially around timing, notice periods, location flexibility, and communication channels.



Fig 10: 'Q12 What time windows suits you best?'



Fig 11: 'Q13 How far are you willing to travel to participate in a marine volunteering event?'

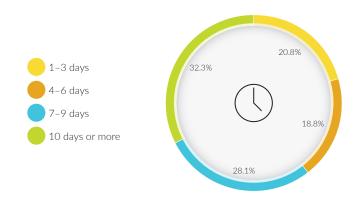


Fig 12: 'Q14 How much notice do you need to attend a marine volunteering event?'

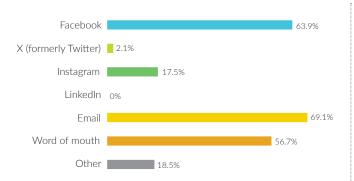


Fig 13: 'Q8 How do you find out about marine volunteering opportunities? (select all that apply)'

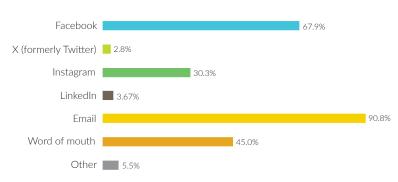


Fig 14: 'Q9 How would you like to find out about marine volunteering opportunities? (select all that apply)'

3. Pop-up event model design

Events run by ReefWatch typically operate within broad time windows – the Great Victorian Fish Count runs over four weeks, underwater weeding takes place from May to October, and the Sea Slug Census spans 10 days. These programs are also flexible in location.

For the pop-up model, we wanted to test whether we could run events during weekdays (when staff availability is higher) and create opportunities for people who often miss out due to weekend commitments.

3.1 Planning a pop-up event

Months-weeks ahead

- Nominate/select a week-long window (Mon-Fri) in advance and keep those days free of other commitments. Tides or other operational factors may influence your choice.
- Prepare all communication materials.
- Finalise risk assessments and safety procedures.

Two weeks ahead

• Check the long-term rainfall outlook on the Bureau of Meteorology website: www.bom.gov.au/climate/outlooks/#/rainfall/summary.

- Monitor 14-day weather forecasts to help narrow your potential event days from five down to two or three.
- Review and update communication and risk documents.

One week ahead

- Review the BOM forecast for predicted rain and check MetEye (www.bom.gov.au/australia/meteye/?loc=VIC_ MW005) for wind direction and speed.
- If the forecast is favourable, update promotional materials to highlight the expected good weather. Send an email to supporters first, giving them the initial opportunity to register.
- If places remain, follow up the next day with a social media post.

Final days

- Continue checking weather conditions.
- Keep promoting any unfilled events and reassure participants of the favourable forecast.
- Finalise all risk procedures.
- Send event details to all registered participants.



Underwater Weeding at The Crystals in Williamstown Kade Mills

4. Implementation of pop-up events

Eighteen events were delivered across five locations (Appendix 2), including Sea Slug Census surveys, Great Victorian Fish Count snorkels, underwater weeding, and kelp restoration tours. Only two events occurred on weekends; the rest ran Tuesday–Friday. All activities involved snorkelling, so numbers were capped by guide ratios.

Of 250 available places, 230 were booked (92%) and 201 people attended (87%).

Weather triggers included:

- no strong (>20 knot) onshore winds in the 1-2 days prior
- no significant rainfall (>10 mm) in the previous week
- no rainfall within 24 hours
- light or offshore winds on the event day.

5. Participant feedback

Participants consistently described the snorkels, surveys, and weeding sessions as inspiring, well-run, and highly enjoyable. People valued the welcoming atmosphere, knowledgeable guides, and opportunities to learn about marine life, kelp restoration, and Sea Country.

Many commented on the exceptional conditions, wildlife encounters, and the ease of participation. Several noted that they were motivated to join future VNPA activities.

5.1 Participant Availability

The majority of participants were able to attend weekday events due to having flexible schedules (Fig 15). One-third (33%) reported working flexible hours, and a further 31% were retired. Students and part-time or shift workers each made up 18% of respondents, while 10% were not currently working. Smaller proportions either took leave to attend (5%) or selected 'other' (3%). This shows a willingness among people with adaptable or non-traditional work patterns to participate in weekday marine activities.



Getting ready to take part in the Great Victorian Fish Count, Rye Pier, Bunurong Country Kade Mills

6. Analysis: Effectiveness of the pop-up model

The pop-up model performed strongly across all metrics.

6.1 Attendance

ReefWatch events traditionally experience 20–50% no-show rates depending on activity type. The pop-up trial achieved an 87% attendance rate – exceptional for free events with capped numbers.

6.2 Participant diversity

The participant mix mirrored the broad cross-section seen at typical ReefWatch events. Importantly, pop-up scheduling drew in first-time attendees who were unable to attend weekend programs.

6.3 Weather and operational efficiency

Selecting events during ideal weather windows:

- improved safety and conditions
- reduced staff stress
- enabled smoother set-up
- encouraged participants to stay longer and socialise.

Clear communication workflows, templates, and risk-management processes further supported efficient delivery.

7. Recommendations for future pop-up marine volunteering

The pop-up event trial demonstrated that short-notice, weather-dependent activities can significantly improve participation, reduce cancellations, and create more meaningful engagement with Port Phillip Bay/Nerm. The following recommendations outline how future programs can maximise effectiveness while maintaining safety and operational efficiency.

7.1 Scheduling considerations

- Avoid Monday events to allow adequate time for staff to prepare equipment, review weather conditions, and finalise communications after the weekend.
- The most effective days for pop-up delivery are Tuesday to Friday, aligning with staff availability and higher weekday flexibility among participants.
- Friday is the preferred weekday for participants and provides strong attendance potential.

7.2 Notice period

- Announce a week-long event window 1–2 weeks in advance.
- Confirm the event 3–5 days beforehand when weather predictions stabilise.
- Send final instructions and risk updates 24–48 hours before the event.
- This staggered approach balances participants' desire for notice with the need to choose weather-safe conditions.

7.3 Preferred times of day

- Morning sessions remain the most popular and are recommended for most in-water activities.
- Afternoon sessions can be used opportunistically but should not be the primary choice.

7.4 Communication channels

- Email should remain the primary communication tool for registration, updates, and confirmations.
- Facebook is the most effective secondary channel for broad promotion.
- Template emails and pre-prepared promotional materials greatly aid rapid deployment.
- Instagram may be used to increase visibility but should not replace email for essential messaging.

7.5 Event types suitable for rapid deployment

Events that require minimal equipment and offer flexible site options are best suited to the pop-up model, including:

- Guided snorkelling sessions
- Sea Slug Census rockpool surveys
- Underwater weeding
- Great Victorian Fish Count snorkels at established sites
- Activities requiring complex logistics or multiple partners are less suited to short-notice implementation.

7.6 Integrating pop-up events with scheduled programs

- Use pop-up events to complement existing planned programs such as the Great Victorian Fish Count and Sea Slug Census.
- Integrating both models increases overall participation, provides backup opportunities during poor weather, and engages audiences who cannot attend weekends.
- Promote pop-ups as additional chances to contribute during active program windows.

7.7 How other community and environmental groups can use the pop-up model

The ReefWatch pop-up approach provides a practical template that can be adapted by a wide range of organisations that deliver community activities outdoors. Key opportunities include:

Building flexibility into program design

- Replace rigid calendars with flexible 'event windows' announced in advance.
- Identify multiple potential sites to allow quick pivots based on conditions.

Pre-prepared communications

- Develop template emails, social media posts, and risk documents that can be deployed rapidly.
- Maintain updated mailing lists to ensure timely notification.

Weather-responsive decision making

- Use clear weather triggers (e.g., rainfall thresholds, wind forecasts, swell conditions) to determine when an event can run safely.
- Adopt a staged confirmation process early flagging, midweek confirmation, and final 24–48 hour updates.

Targeting people with flexible schedules

- Many community members retirees, students, part-time workers, remote workers are highly available mid-week.
- Pop-up events can reach audiences who miss weekend-only programs.

Increasing reliability and reducing cancellations

- Running events during good weather windows increases safety and reduces wasted resources.
- Avoids the reputational and logistical impacts of repeated cancellations.

Expanding reach and strengthening stewardship

- Pop-ups are particularly effective for:
 - citizen science surveys
 - clean-ups
 - · ecological monitoring
 - guided nature walks
 - restoration site visits.

By adopting the pop-up model, community-engaging organisations can deliver more consistent, inclusive, and resilient programs that respond to both environmental conditions and community preferences.

8. Conclusion

This project set out to determine whether short-notice, weather-dependent pop-up events could provide a more flexible and reliable alternative to traditional marine volunteering models. The results clearly demonstrate that this approach is highly effective and well-suited to outdoor community programs.

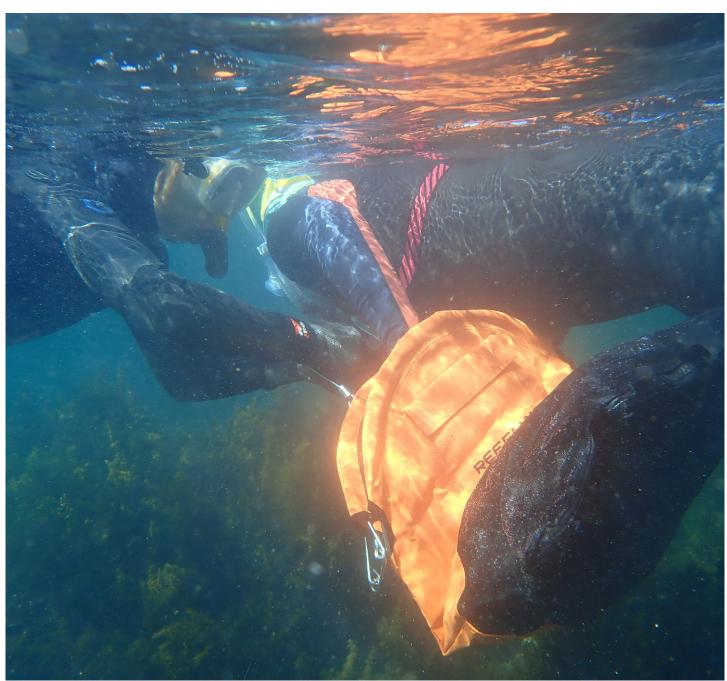
Survey data revealed a community that is active in Port Phillip Bay/Nerm, eager to volunteer, and open to weekday participation when conditions are favourable and communication is clear. These insights directly shaped the popup model,, informing ideal timing, preferred notice periods, and communication channels.

Eighteen events were successfully delivered across five locations, achieving high registration numbers and an

exceptional 87% attendance rate – far exceeding typical ReefWatch patterns. The ability to select ideal weather windows improved safety, enhanced participant enjoyment, and reduced the stress and workload associated with managing weather-sensitive activities.

Participants praised the organisation, educational value, and welcoming community atmosphere, and many expressed motivation to return for future activities.

The trial also demonstrated which event types are best suited to short-notice delivery and highlighted the strong willingness of people with flexible schedules – such as retirees, students, and part-time workers – to attend weekday activities.



Snorkellers weeding underwater Kade Mills

Appendix 1: Baseline survey

Q1. Roughly how often do you tend to dive/snorkel/rockpool in Port Phillip Bay at different times	Q5. What volunteering activities have you done in the marine environment? (select all that apply)	Q10. What are your preferred days to volunteer?	☐ 7-9 days ☐ 10 days or more		
of the year? (Summer – Autumn – Winter – Spring)	☐ Citizen Science – collecting information on plants or animals ☐ Marine debris clean-up	☐ Monday☐ Tuesday☐ Wednesday☐ Thursday	Q15. Have you ever registered to attend a marine volunteering even that ended up being cancelled?		
☐ 1-2 days a week ☐ 1-3 days a month	☐ Marine pest removal ☐ Other (please specify)	☐ Friday ☐ Saturday	☐ Yes ☐ No		
Less than a couple of days in totalNot at all this time of year	Q6. List the last three marine volunteering events you attended.	☐ Sunday ☐ It varies	Q16. Why was the event cancelled?		
Q2. Do you tend to (select all that apply) Dive Snorkel/free-dive Rockpool	Q7. If you answered 'None so far' in Q4, is there a particular reason/s why not? Q8. How do you find out about	Q11. Would you consider attending marine volunteer activities during the week (Mon-Fri)? ☐ Yes ☐ No	 ☐ Unsure ☐ Weather ☐ Water quality ☐ Illness ☐ Personal ☐ Other (please specify) 		
□ None of the above	marine volunteering opportunities? (select all that apply)	Q12. What time windows suit you best?	Q17. Have you ever registered a marine volunteering event and		
Q3. How many years have you been diving/snorkelling/rockpooling in Port Phillip Bay (roughly)? ☐ Less than a year	☐ Facebook ☐ X (Twitter) ☐ Instagram ☐ LinkedIn ☐ Email ☐ Word of mouth ☐ Other (please specify)	□ Early morning□ Morning□ Afternoon□ Evening	not attended? Yes No		
☐ 1-5 years ☐ 6-10 years ☐ 11-20 years		Q13. How far are you willing to travel to participate in a marine	Q18. How come you weren't ab to attend the event?		
☐ 21-30 years ☐ More than 30 years	Q9. How would you like to find out about marine volunteering oppor-	volunteering event? 30 minutes 1 hour	☐ Unsure ☐ Weather ☐ Water quality ☐ Illness ☐ Personal ☐ Other (please specify) Is there anything else you'd like tell us to help us create more mrine volunteering opportunities'		
Q4. How often do you participate in volunteering activities in the marine environment?	tunities? (select all that apply) Facebook	☐ 1 hour 30 minutes ☐ Over 1 hour 30 minutes			
Often (about once a month)Occasionally (a few times a year)		Q14. How much notice do you need to attend a marine volunteering event? □ 1-3 days			
☐ Rarely (once a year) ☐ None so far	☐ Other (please specify)	☐ 4-6 days			

Appendix 2: Event details

1 pperiuw 2. Evert uctuits											
Date	Day	Time	Season	Event Name	Location	No. of places	No. of people registered	No. of people attend			
02/04/2024	Tuesday	7:00	Autumn	Sea Slug Census	Ricketts Point	10	6	5			
02/04/2024	Tuesday	8:30	Autumn	Sea Slug Census	Ricketts Point	10	5	4			
20/08/2024	Tuesday	15:00	Winter	UW Weeding	Steels Rocks	10	9	8			
21/08/2024	Wednesday	15:00	Winter	UW Weeding	Steels Rocks	10	6	6			
29/11/2024	Friday	16:00	Spring	Great Victorian Fish Count	Jawbone	10	10	9			
06/12/2024	Friday	16:00	Summer	Great Victorian Fish Count	The Crystals	20	20	14			
08/02/2025	Saturday	9:00	Summer	Great Victorian Fish Count	Rye Pier	20	20	18			
20/02/2025	Thursday	14:00	Summer	Great Victorian Fish Count	Ricketts Point	10	10	10			
20/02/2025	Thursday	16:30	Summer	Great Victorian Fish Count	Ricketts Point	10	10	10			
20/03/2025	Thursday	11:00	Autumn	Kelp Restoration	Ricketts Point	10	10	8			
28/03/2025	Friday	8:00	Autumn	Kelp Restoration	Ricketts Point	20	20	18			
28/03/2025	Friday	11:00	Autumn	Kelp Restoration	Ricketts Point	20	20	20			
09/04/2025	Wednesday	8:00	Autumn	Sea Slug Census	Ricketts Point	20	20	18			
09/04/2025	Wednesday	11:00	Autumn	Sea Slug Census	Ricketts Point	20	20	15			
04/05/2025	Sunday	14:00	Autumn	UW Weeding	The Crystals	10	10	9			
15/05/2025	Thursday	15:00	Autumn	Great Victorian Fish Count	Ricketts Point	20	18	13			
18/09/2025	Thursday	10:00	Spring	UW Weeding	The Crystals	10	6	6			
18/09/2025	Thursday	13:00	Spring	UW Weeding	The Crystals	10	10	10			



Snorkeller removing introduced alga Kade Mills