Swarovski Foundation Waterschool Australia – 2023 Annual Report

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The 2023 Swarovski Waterschool Australia Program

Acknowledgment of Country

Acknowledgment of Country

Earthwatch Australia acknowledges the Aboriginal and Torres Strait Islander peoples of this nation. We acknowledge the Traditional Custodians of the lands on which our company is located, and where we operate and educate through the Swarovski Waterschool Australia program. We pay our respects to ancestors and Elders, past and present.

Earthwatch is committed to honouring Aboriginal and Torres Strait Islander peoples' unique cultural and spiritual relationships to the land, waters and seas and their rich contribution to Australian and global society. We recognise that sovereignty over these lands and waters was never ceded.

Aboriginal and Torres Strait Islander people have cared for these lands long before we arrived, yet we all hold a responsibility to do our part, and to combine our efforts to help heal Country.

Executive Summary and Overall Program Impact

The Swarovski Foundation Waterschool (SFWS) Australia program first full implementation was delivered by Earthwatch across New South Wales (NSW) in 2022.

Throughout 2023, 383 students and 26 teachers from 11 schools were directly involved in the SFWS Australia program, and 1,550 students, 171 teachers, and 4 schools were engaged indirectly.

The 2023 program was found to be both diverse and inclusive as evidenced using GEDSI indicators.

Earthwatch subject matter experts facilitated online sessions as a part of the *Water Health Series*, and 3 Aboriginal Elders shared water-related cultural, historical and spiritual knowledge and perspectives during the *Connect to Country* teacher training sessions.

Forty-one student peer-teaching workshops were created, with many supporting digital and print resources made available for global distribution and water education opportunities.

Earthwatch and Our Lady of the Assumption Catholic Primary School hosted this year's SFWS Flagship Event, with Llandilo Public School, Meadowbank Public School and The Nature School holding subsequent events. These events brought together students, teachers, mentors, Swarovski volunteers, and guest attendees from various community groups, environmental organisations, councils, and governmental departments to view student peer-teaching workshops and engage in nature-immersive activities.

SFWS program activities were successful in impacting the behaviour of teachers and students, especially regarding water conservation activities and daily practices.

Post-program, most students felt confident speaking to both peers (87%) and adults (81%) about how to protect and care for water.

The Australian program has gained widespread interest through targeted media campaigns and online program presentations, including as teacher professional development. General media reach was over 10,000 for the year, with an event-related social media campaign contributing over half of this reach.

Resources and assets generated include case studies, photography and videography from the events and a subsequent school produced videos that will elevate media presence and outreach opportunities for the 2024 program.

Community, state, national and global partnerships were incepted and fostered throughout 2023.

Program management was shifted from Hannah Gentle to Loretta Leary in September with a successful handover completed.

The 2023 SFWS Australia program was highly successful, with overwhelmingly positive feedback from all stakeholders. Teacher feedback and lessons learned throughout this year will be utilised by the Program Manager to improve the design, implementation and impact of the 2024 Swarovski Foundation Waterschool program in Australia.

Figure 1: Summary of the impact of the 2023 Swarovski Waterschool Australia program

2023 Program Design

The 2023 program design was adjusted to incorporate both in person peer teaching events and environmental action projects.

Teacher resources were created which outlined key activities, actions and events embedded into each school term to aid in planning and understanding of the program components.

Term 1 focused on school recruitment, with classroom planning, teacher training and workshop creation being the focus for Term 2, workshop practice and local workshop presentations or action projects for Term 3, and the ability to inspire peers at the Flagship other events in Term 4, as well as action projects, which were followed by a reflection of the year-long program implementation to identify successes, challenges and to evaluate impact.

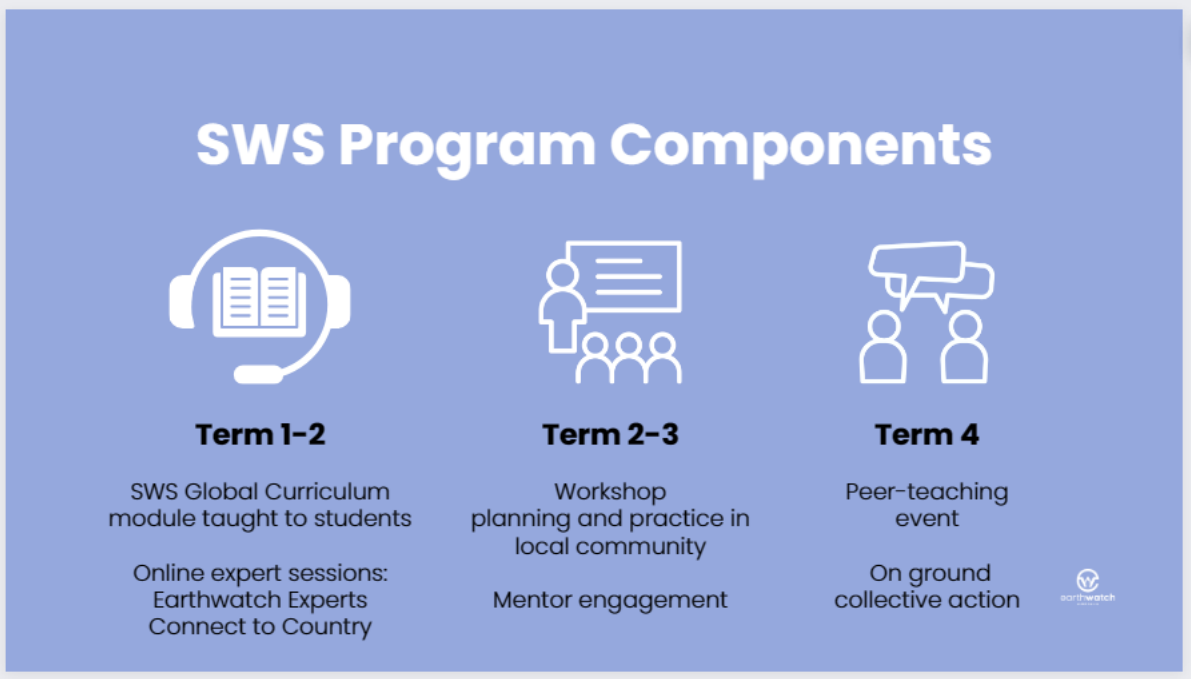


Figure 2a: 2022 SFWS Australia Annual Outline for ease of planning in schools.

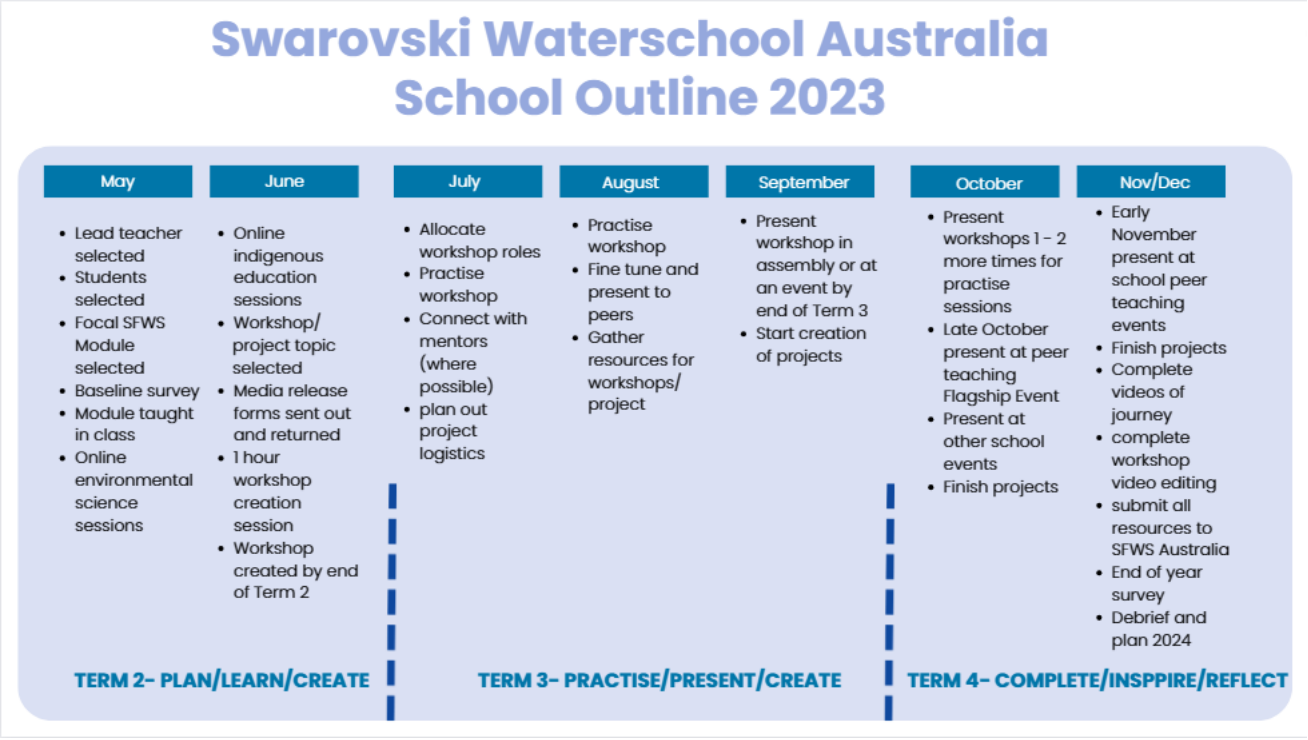


Figure 2b: 2023 SFWS Australia Annual Outline for ease of planning in schools.

School Recruitment

Initial recruitment of schools was greater than expected with teachers and schools adapting to the return to face to face learning within the context of the ongoing COVID-19 pandemic. Fifteen schools were recruited with others wanting to be “audience” schools for this year.

The adaption of the program to include a choice of either peer teaching workshops and/or environmental action projects gave schools some autonomy over their SFWS journey.

Several other schools initially expressed interest in the program, however they were unable to gain senior management approval due to staffing shortages and the cessation of all external programs to ensure core curriculum outcomes were achieved for students with remaining available staff.

Program implementation needed to commence in Term 2, and as such school recruitment ended with 15 schools onboarded to complete the full program for 2023. However, staff changes and relief teacher shortages resulted in 3 schools unable to complete their commitments and leaving the program for the year. The recruitment audience schools did allow for "buffer" when schools left the program and all targets were met for this year. Face to face engagement with teachers and students has resulted in growth in repeat interest from schools and recruitment of new schools for the 2024 program.

Participating Schools

A variety of school types were recruited from across New South Wales including Schools for Specific Purposes (SSP schools) which resulted in a high level of diversity and inclusion within the 2023 program.

Geographical distribution was also a consideration, to ensure a variety of water contexts were captured within peer-teaching workshops to bring State-wide water context and diverse water education topics to the end of year Flagship Event.

Schools residing along the East Coast of NSW were targeted to provide ocean-related water education topics and peer-teaching workshops about mangroves, coastal erosion, marine biodiversity, and pollutants such as metal appliances, motor vehicles, and microplastics.

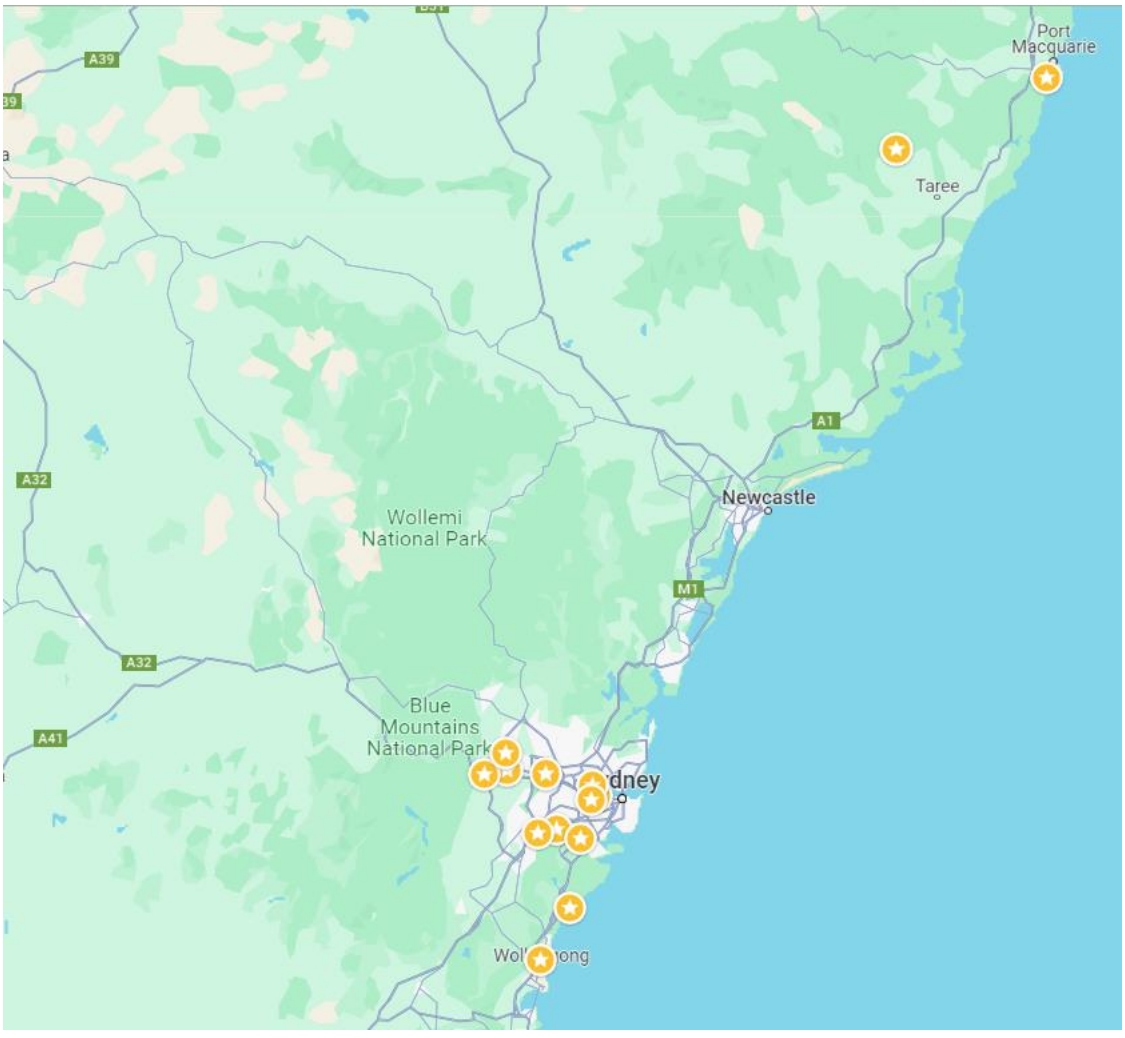


Figure 3a: Geographical location of schools that participated in the SFWS Australia 2023 program across New South Wales, Australia.

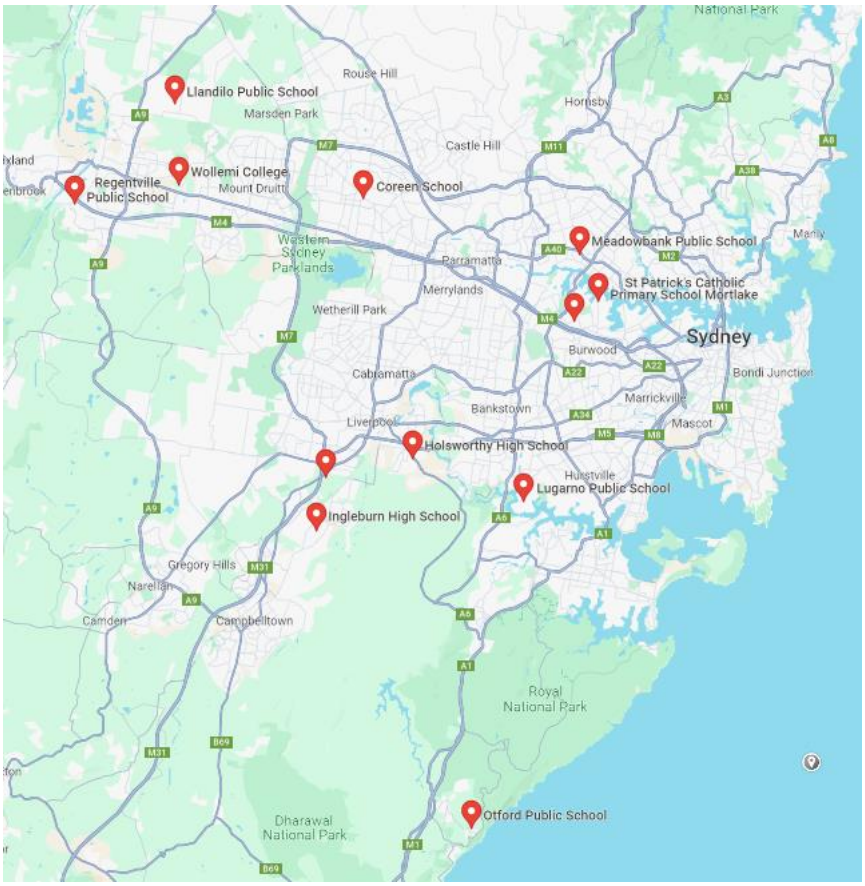


Figure 3b: Geographical location of schools that participated in the SFWS Australia 2023 program across Sydney, Southern Sydney and Greater Western Sydney areas, NSW Australia.

School Name	School Type	Location	Workshop Topic
Ajuga School	School for Specific Purposes	Glenfield, NSW	Bush Tucker at Ajuga
Bobin Public School	Government Primary School	Bobin, NSW	Audience Group
Coreen School	School for Specific Purposes	Blacktown, NSW	Making A Whole Olla Water
Holsworthy High School	Government High School	Holsworthy, NSW	Life Of A Chip Packet
Hunter River High School*	Government High School	Heatherbrae, NSW	
Ingleburn High School**	Government High School	Ingleburn, NSW	
Llandilo Public School	Government Primary School	Llandilo, NSW	Water Flows And Rubbish Goes
Luddenham Public School*	Government Primary School	Luddenham, NSW	
Lugarno Public School	Government Primary School	Lugarno, NSW	Garno's Grand [Rain] Garden
Meadowbank Public School	Government Primary School	Ryde, NSW	Water In Your Day
Otford Public School	Government Primary School	Royal National Park, NSW	Plants Are Forming, We're Exploring!
Our Lady of the Assumption Catholic Primary School	Catholic Primary School	North Strathfield, NSW	Water Across the 8 Waterschool Countries
Regentville Public School	Government Primary School	Regentville, NSW	Audience Group
St Patrick's Catholic Primary School	Catholic Primary School	Mortlake, NSW	Waste Wise Water!
The Nature School	Independent School	Port Macquarie, NSW	Shower Power
Wollemi College	Catholic College	Werrington, NSW	Audience Group

* withdrew from the program before the end of Term 2, 2023

** withdrew from the program November 2023

Table 1: List of 2023 Swarovski Waterschool Australia participating schools and their peer-teaching workshop titles presented at the Flagship Event or school-based events.

Teacher Training Sessions

Online teacher training sessions were held through May and June. All teachers involved in the implementation of the Waterschool program, as well as any senior staff members, were invited to attend these sessions. Across all sessions, a total of 45 teachers attended to learn about water challenges, possible solutions, and Aboriginal water perspectives. Most importantly, they were guided in how to accurately and respectfully transfer Indigenous information to their students, and were provided with local, national and international frameworks and interactive resources to support classroom learning and future workshop development.

The following table summarises attendance for each of the 2023 Teacher Training sessions. Although teachers were only required to attend one Earthwatch Expert and one Connect to Country online session for this component of the program, some teachers attended more than two sessions.

Presentation	Presenter	No. of Attendees
Water Supply & Use	Dr. Scott Wilson (PhD Ecotoxicology)	4
Tidal Wetlands	Jock Mackenzie	7
Climate Resilience	Steve McDonald	4
Water Pollutants	Dr. Scott Wilson (PhD Ecotoxicology)	6
Soil Health & Urban Greening	Sandra McCullough (Master of Urban Horticulture)	5
Human Health & Food Biodiversity	Hannah Gentle (Master of Human Nutrition)	3
Connect to Country: Creation Stories	Uncle Shayne Williams (PhD)	4
Connect to Country: Indigenous Plants	Mr. Adam Bruggerman	7
Connect to Country: Art	Aunty Margaret Foat	5
Total attendees		45

Table 2: Count of teacher attendance for the Water Health Series environmental expert sessions and the Connect to Country Indigenous education sessions held online during Term 2 of 2023.

Although there was a lesser number of attendees at these online sessions, this may be due to teachers having already seen the sessions in 2022 and/or being unable to attend at the specified times. Flexibility in time slots and offering pre-recorded sessions may boost participant numbers in 2024.

Environmental Expertise – Earthwatch Scientists and Executives

Teacher attendance for the Water Education Series led by Earthwatch subject matter experts was successful, and program feedback showed this water education component was a crucial component of the program that schools weren't accessing (or weren't able to access) prior to the program.

Lead teachers identified several additional occasions throughout the year where environmental education experiences external to the SFWS Australia program occurred at school. This bodes well for the program remaining valuable to schools by providing direct access to water-related research presented by subject matter experts and provided in a format that is well suited to teacher engagement.

Consideration regarding both the time of day and the training mode (online) were important factors to accommodate participation, and access to the SFWS Global Curriculum provided complimentary information and resources for teachers to confidently relay water-related environmental information to students.

Due to the success of engaging teachers with these online training sessions, the addition of new schools, and the clear demand for access to subject matter experts for robust water education with the opportunity for live Q&A, the environmental expert sessions will remain a component of the 2024 program but will have an Indigenous knowledge and cultural focus.

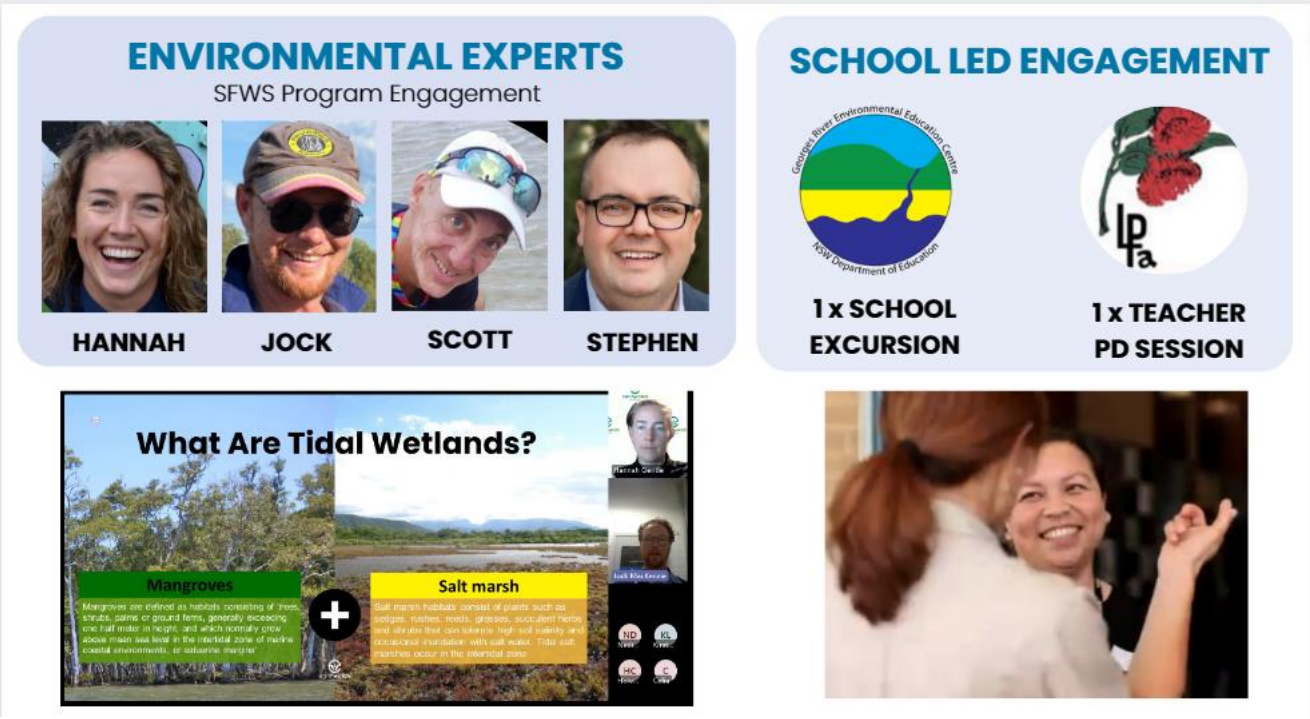


Figure 4: Environmental education opportunities provided in the SFWS Australia program design through Earthwatch, and additional opportunities organised externally by teachers in the program in 2023.

Connect to Country – Aboriginal Elders and Knowledge Holders

Connect to Country online teacher training sessions were complimented by five additional hyper-local Elder engagement and Indigenous educational experiences for several schools in 2023.

This supported our students and teachers to:

i) Engage local Indigenous Elders for accuracy of information;
ii) to gain permission for language and story communication;
iii) to best align their activities with the NSW DoE Reconciliation Action Plan;
iv) to contribute to segments of the NSW curriculum such as Aboriginal Language;
v) to meet the cross-curriculum priority of Aboriginal and Torres Strait Islander histories and cultures; and/or
vi) to meet the general capability of Intercultural understanding. As traditional knowledge is held only in certain locations, and only by certain First Nations people in NSW suggests the need for schools to be able to engage local Elders to ensure accuracy of information and to gain permission to include in workshops and supporting resources.

Teacher attendance for the Connect to Country sessions was low, and global resources can't easily be contributed to compliment this highly contextual component of the teacher training. Addition resources will be created in 2024 with the addition of resources funded through the 2023 Crystal Week donation given to SFWS Australia.

These online sessions will remain within the teacher training for the 2024 program as a broad introduction to First Nations perspectives on connection with water, ways of exploring and expressing this connection, what it means to care for Country as a whole, and Indigenous practices that ensure and maintain water health as an individual and as a community. Earthwatch will examine how First Nations perspectives and inter-cultural understanding of water can be incorporated more broadly into the SFWS program for use by other global partners.

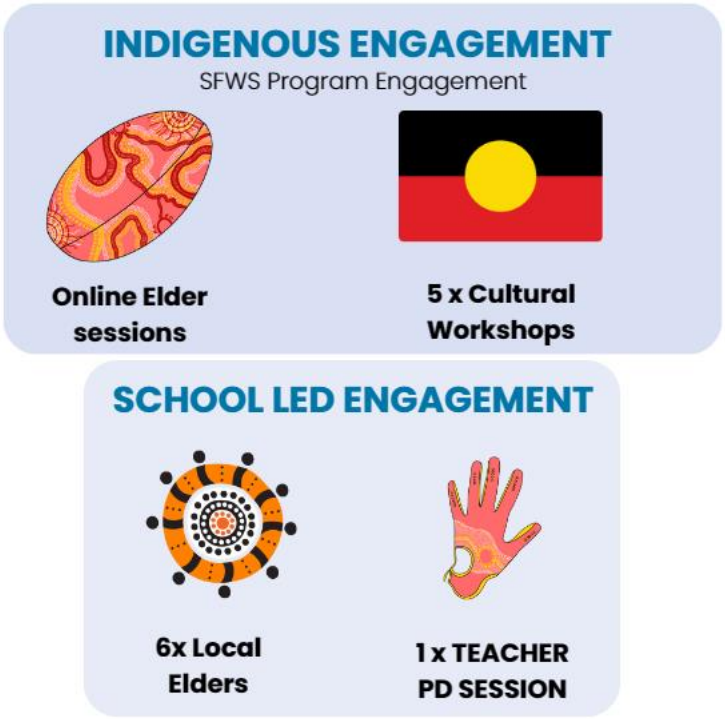


Figure 5: Elder and Indigenous knowledge holder engagement opportunities provided in the SFWS Australia program design through Earthwatch-fostered relationships, and additional opportunities organised external to the program in 2023.

Teacher Professional Development

Following the Flagship Event in October 2022, a Lead Teacher from Lugarno Public School and the SFWS Australia Program Manager were invited to speak about the program's success in the Library school environment at the Primary Libraries Creative Collaboration (PLCC) nation-wide meeting in November of 2022. This online session involved an explanation of the SFWS program, and evidence of the exact alignment with the NSW Department of Education Information Fluency Framework used to guide library learning throughout the year. The session contributed to Teacher Professional Development for all attendees.

The 2023 PLCC Conference was held at the NSW Teachers Federation Conference Centre in Sydney in March, and the Program Manager were invited to present a 40-minute workshop about the SFWS Australia program, its role in Library learning, and its alignment with the Information Fluency Framework to school Principals from across Australia. This session also resulted in interest from one school to be part of the program in 2023 and one in 2024

Peer-teaching Workshops

- 41 peer-teaching workshops
- 25 digital and print educational resources

Forty-one student peer-teaching workshops were created during the 2023 program. Each was unique despite workshops relating to similar water challenges, due to the creative activity component and workshop structure provided by the Earthwatch Kids Teaching Kids model.

In 2023, along with freshwater education, ocean health was added to the available workshop topics. See Table 1 of this report for the workshop titles which describe the various water education themes presented at the flagship and school-based events.

No two workshops were the same, giving a large variety of information and activities for students to build their breadth of water knowledge and gain greater understanding of collective challenges and their corresponding solutions during the 2023 SFWS Australia Event Season.

Overall, 41 peer-teaching workshops with 25 accompanying digital or printable resources were created during the 2023 SFWS Australia program. This surpasses not only the 2023 target of 15 workshops but is close to the 3-year program target of 45 workshops (15 workshops per year across 2022-2024).

Workshop Planning Sessions

The Program Manager facilitated peer-teaching workshop sessions for twelve schools across New South Wales to create the workshop structure, assist in selecting a water focal topic and interactive activity, and allocating roles and responsibilities to educate their peers about a local water challenge and how to overcome it by changing behaviours and by working together.

Sessions were facilitated for student groups ranging from 85 altogether in the school Library, to 5 in an SSP school classroom. Sessions lasted 90 minutes, with follow-up online check ins made available for students to ask further questions and receive guidance on workshop content, structure, interactive activity, and accompanying resources.

Workshop School Community Presentations

Upon completing the workshop planning and creation phases, participating schools utilised other classroom cohorts, full school assemblies, and school community events to practice presenting their peer-teaching workshops in preparation for the Flagship Event.

Lead Teachers (n=13) reported where and how students presented their workshops to their immediate peers at school, with some schools electing to also present to older community members such as guardians and the general public.

Workshop Resources

Twenty-five digital and physical water education and peer empowerment resources were created as part of the 2023 SFWS Australia program. Resources included posters, board games, card games, videos, sustainable bookmarks, word finds, water audit sheets, dioramas, water filtration devices, a model toilet, dances, songs, fact cards and an e-book.

These resources were distributed throughout school communities during workshop presentations, for students to take home and use to engage their households and other community members in water conversations by sharing their learnings and reflections and encouraging change.

Action Projects

Three on-ground action projects were planned, designed, and implemented throughout the year by program participants and their wider school communities. Schools utilised existing sustainability projects such as school kitchen gardens and other externally run programs to enhance water-related education and action, and to inspire school-wide behavioural change.

See Figure 6 for examples of on-ground action projects, campaigns, and water-related activities schools carried out while participating in the SFWS Australia program.

Figure 6a: Action projects implemented in schools 2023

Figure 6b: students making mulch for drought resistance gardening in the school's kitchen garden.

2023 Swarovski Waterschool Australia Peer Teaching Events

The first peer-teaching event for the global SFWS Australia program was held on the 23rd of October 2023 at the Llandilo Public School in Llandilo, NSW. Students, teachers, and guests from the local area travelled to the school to participate in the event.

The second event was at The Nature School in Port Macquarie, NSW on October 25th, 2024. Students and one teacher, from a school 2 hours away as such was the interest, attended this event.

The Third event was the Flagship Event, hosted by Our Lady of the Assumption Catholic Primary School, in North Strathfield, NSW on 31st October 2023.

Earthwatch staff present included the Program Manager/ Education Programs Manager and Chief Scientist. Both gave speeches at the beginning and end of the event and the Chief Scientist held workshop sessions for the students on microplastics in the water. The Head of Education was scheduled to attend but fell ill on the day.

Four Indigenous Elders attended the event, conducting a water ceremony and an ochre ceremony for staff, students and guests. The smoking ceremony was cancelled as it was a Total Fire Ban Day for the whole state of NSW.

Four Swarovski office members volunteered as Group Leaders and Event Support personnel. The school's photographer also attended the event, to capture photos of the SFWS Australia program for marketing and communications purposes.

The final event was hosted by Meadowbank Public School and held at Bicentennial Park on 2nd November 2024. Aboriginal Elder, Dr Shayne Williams attended the event and ran 5 sessions on cultural history and traditional uses of water in the local area. Earthwatch staff present included the Program Manager/ Education Programs Manager and Chief Scientist. Both gave speeches at the beginning and end of the event, as did Dr Shayne Williams.

Figure 7a: 2023 Flagship Event attendance and benefits to various stakeholders.

https://vimeo.com/899381422?share=copy

Figure 7b: 2023 Flagship Event water pledge by Our lady of the Assumption student.

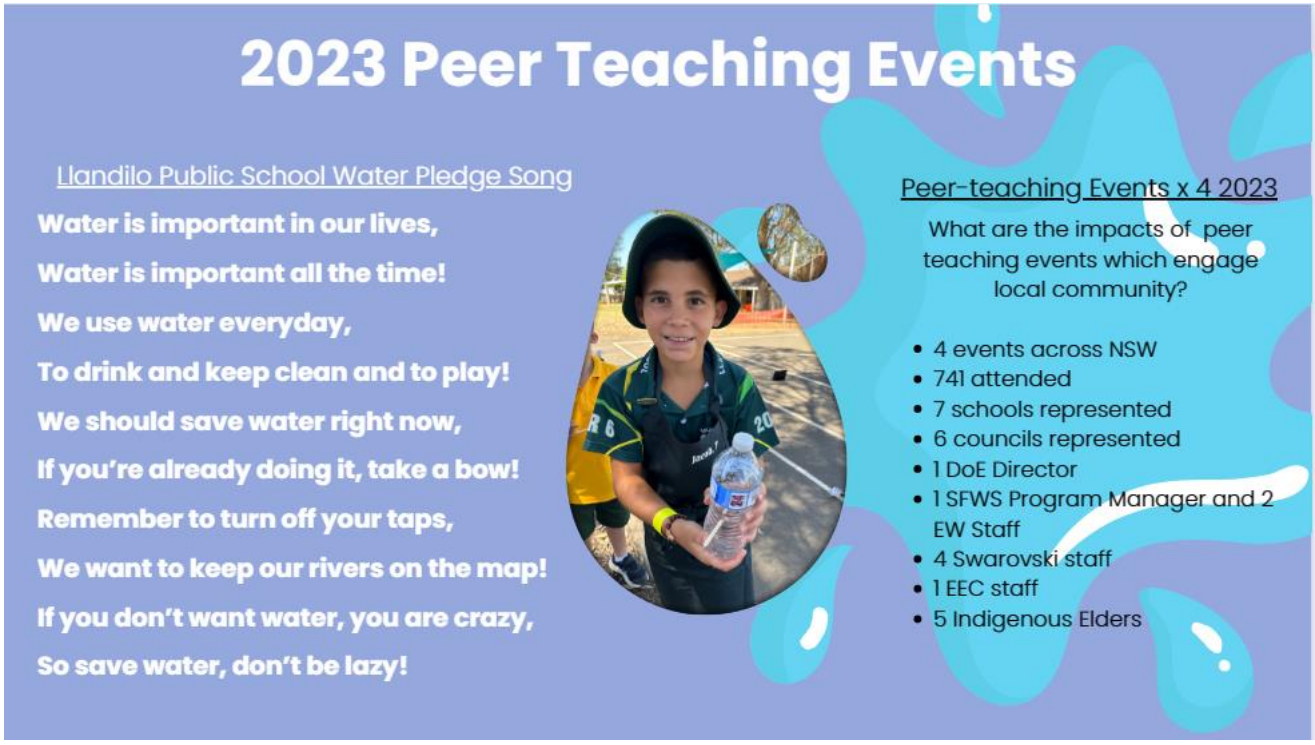


Figure 7c: 2023 Peer-teaching events attendance and a collective water pledge from Llandilo Public School.

The Flagship Event featured an opening ceremony complete with two Student MCs from Our Lady of the Assumption Catholic Primary School (OLA), a Welcome to Country, Water Ceremony and Ochre Ceremony led by Wangal Elders Aunty Kerrie, Aunty Cheryl, Danielle Dominici and Margaret Kenton. A mainstage session by students from OLA Catholic Primary School, 13 peer-teaching workshop presentations and two EW Chief Scientist led workshops were delivered on the day. All workshops included hands-on STEM/STEAM based activities for students to explore and learn through.

Schools were allocated a workshop station for the day, where each took a turn presenting and viewing 30-minute peer-teaching workshops. The Program Manager ensured diversity of water topics and school types within the workshop stations to encourage further water education and social opportunities for students and teachers during the event.

The closing ceremony featured a Water Pledge, where a student from each school shared what they had learned throughout the day, and then made a pledge to water. One student made a pledge that included having the whole audience participate. A shorter version was visually recorded for use later in marketing and communications for SFWS Australia as the original version was done spontaneously and was not recorded. (see Figure 7b for video link)

Closing remarks were shared by Vanessa Cricelli from OLA, Esther Kim from Swarovski and Chief Scientist Dr Scott Wilson. A final thank you, collective water pledge (see Figure 8) and farewell was shared by the Program Manager before attendees departed. The collective water pledge was used by the Program Manager at all events and proved to be exceptionally popular with students beyond the event.

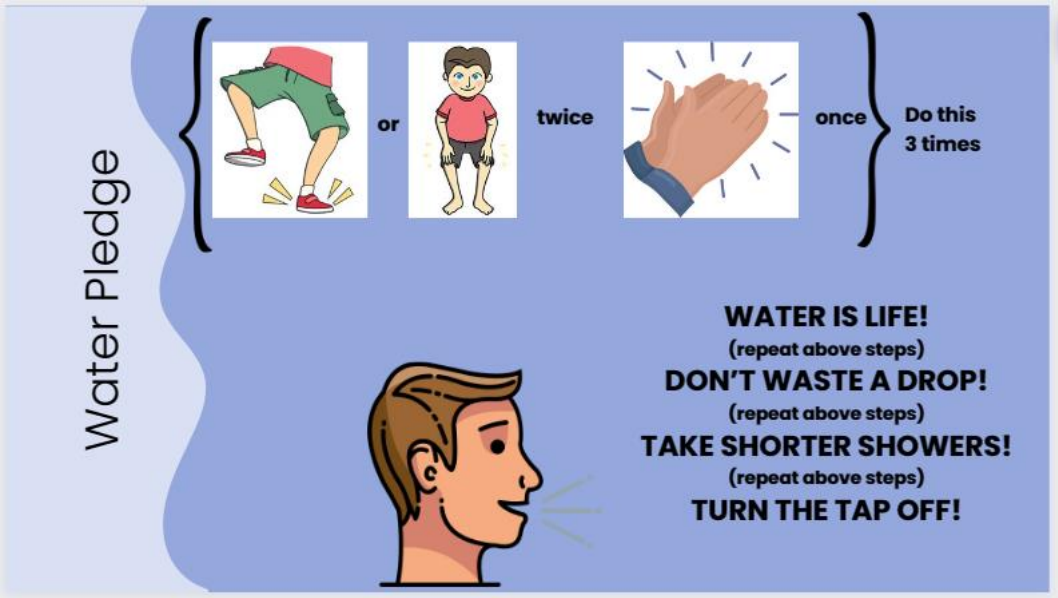


Figure 8: 2023 Water Pledge led by Program Manager at each event.

Program Monitoring and Evaluation

Program Engagement

Direct Engagement

- 383 students
- 26 teachers
- 11 schools

Throughout 2023, 383 students and 26 teachers from 12 schools across NSW were directly engaged in the SFWS Australia program. Fortunately, several of these 11 schools elected to run the SFWS Australia program throughout an entire classroom or year level, resulting in 383 students completing the Waterschool program in 2023 exceeded the direct program engagement target of 375 students indicated in the Program Description. We anticipate this target to be surpassed in 2024 with 3 additional schools being onboarded into the SFWS Australia program for a total of 15 schools.

Indirect Engagement

- 1550 students
- 171 teachers
- 4 schools

The indirect program engagement was extensive, because of schools holding their own peer teaching events during October and November These presentations achieved an indirect engagement of 1,550 students and 171 teachers, which has exceeded the 2023 program delivery target of 1,500 students. Additional teacher involvement was spread across online teacher training, workshop planning and practice, on-ground action project planning, and mentorship. Additional student involvement stemmed from peer-teaching to various cohorts at school and engaging the entire school in educational campaigns and on-ground water projects such shorter shower campaigns and rain garden installation.

Media reach

- 11,855 total reach
- 672 website views
- 11,183 social media engagements

Total media reach for 2023 was 11,855 expressed as a combination of total web page views and total social media post reach. Nearly 700 web page views were achieved in 2023, with the SFWS Australia landing page receiving the most page views. Total reach for socials posts throughout the year was 11,183 which is an increase of 1,646 compared to 2022 reach. Almost all (94%) of media reach was achieved through social media platforms.

SOCIALS							
Campaign and events	**Platform**	**Number of Posts**	**Clicks**	**Reactions/Likes/ Comments/ Retweets**	**Impressions**	**Reach**	**Eng rate**
	Facebook	21	378	113	7409	6393	7.78%
	Instagram	19	NA	283	4246	3404	5.99%
	Twitter/X	12	1	6	714	NA	1.1%
	LinkedIn	3	30	27	672	NA	6.61%
TOTAL		**55**	**409**	**429**	**13,041**	**11,183**	**5.37%**

WEBSITE				
Page	**Page Title**	**Page views**	**Users**	**Avg. time on page**
/education/school-programs/swarovski-waterschool-australia	SFWS Landing page	504	198	1m 01s
/education/school-programs/swarovski-waterschool-australia/ swarovski-waterschool-australia-education-resource-hub	SFWS Education Hub	59	29	3m 40s
/news-media/news/earthwatch-australia-and-swarovski -waterschool-announce-water-education-partnership	Blog partnership announcement	27	22	38s
/news-media/news/swarovski-waterschool-australia -the-nature-school-in-port-macquarie	Swarovski Waterschool Australia: The Nature School in Port Macquarie	82	55	28s
TOTAL		672	304	

Table 3a: Total media reach for the 2022 SFWS Australia program

As part of the 2023 school recruitment process, several organisations and networks were approached to share a program flyer and program information. To date, this information has been shared with over 1,300 education staff across the country, including 86 Aboriginal Education Officers across NSW to reach prospective Indigenous schools for the 2024 program. These Aboriginal Education Officers will be contacted again as part of the recruitment process for 2024.

Diversity and Inclusion – GEDSI Indicators

Level of diversity and inclusion was assessed by utilising gender, ethnicity, disability and social inclusion (GEDSI) indicators. This assessment was completed by lead teachers from each school (n=13), and a subset of students (n = 86) for a total of 99 participants. Note student participation in this assessment (i.e the ability to share student-related information) was determined on a school-by-school basis. Students participating in the assessment (n = 86) were aged between 9 and 14 years.

Gender

Of the 99 total program participants assessed, 61 were female and 38 were male. Students assessed included 40 females and 46 males, whilst lead teachers assessed included 12 female and 1 male lead teachers. These results are indicative of gender equality for student access to (water) education.

The significant discrepancy between female and male teachers is indicative of the 3:1 ratio of female:male teachers present in the current Australian education system (https://www.abs.gov.au/articles/students-near-4-million-female-teachers-outnumber-males). Note only male and female gender-related options were provided for participants to choose from, which may not provide full gender representation nor explanation.

Ethnicity

Lead Teachers were asked to report all student and teacher ethnicities represented in the cohort whom completed the full Waterschool program in 2023 (at least 20 hours of training and education).

Fifty-seven percent of participating schools had Aboriginal or Torres Strait Islander (ATSI) student or teacher representation, which is encouraging as the program includes Indigenous education and activities which these program participants have a right to experience first-hand. As Sydney has a diverse population, representation from many ethnicities within the study cohort is expected and evident in the 19 different ethnicities listed as program participants in Table 4.

Ethnicity	Percentage of schools (n=13) with ethnicity represented
Australian	100%
Aboriginal and Torres Strait Islander	57%
Chinese	61%
English	61%
Indian	54%
Italian	23%
Irish, Scottish, South African, Maltese, Arabic, Mongolian, Indonesian, Japanese, Sudanese, Middle Eastern, Russian, German, Polish	7%

Table 4: Percentage of schools with an ethnicity represented within the teacher and student cohort that completed the2023 SFWS Australia program.

Disability and Social Inclusion

Disability was defined using The United Nations Convention on the Rights of Persons with Disabilities (CRPD) description of persons with disabilities, as including 'those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others'.

Lead teachers identified 24 of the students (6%) that participated in the 2023 program had a disability. This is slightly less than the 1 in 5 indicated in NSW public schools in 2021 (https://education.nsw.gov.au/teaching-and-learning/disability-learning-and-support/our-disability-strategy/disability-progress-report), however this could be due to the inclusion of multiple school types in the program, and the school types whose teachers elected to complete the GEDSI assessment and provide information regarding learning disabilities (n=13).

Social inclusion is indicated in the variety of school types selected to participate in the program for 2023, with 2 SSP, 8 Government, 1 Independent and 2 Catholic Private school involved. The four peer teaching events was a rare

opportunity for students from this many different schools to come together and learn from one another. They were provided equal access to teacher training, scientific and indigenous experiences, Program Manager support, school grants, and environmental mentoring throughout the year.

SFWS Global Curriculum – Module Use and Local Curriculum Alignment

Figure 9 shows which of the Global Curriculum modules were most utilised by teachers participating in the full SFWS Australia program in 2023, and which aspects of the NSW curriculum the selected modules were aligned with.

Alignment was dictated by the type of teacher leading the program at each school; a Teacher Librarian aligned several modules with the Information Fluency Framework, a Science teacher aligned a module with the Sustainability Action Process (Sustainability is a cross-cutting theme in the Australian Curriculum), and a teacher assigned to teach exactly according to the UNSDGs aligned modules to form part of project-based classroom learning. Interestingly, no teachers utilised Module 1 of the Global Curriculum, perhaps as this is an introductory module about team building and setting goals which the teachers had no need for as rapport with students and goal setting within the classroom had already been established.

As teachers knew this would feature as a key facilitated component of the program, they may have elected other modules to focus on before the peer-teaching workshop planning sessions were facilitated in the classroom by the Program Manager. Overall, modules 5, 6 and 7 seem to align best with Australian school water contexts, curriculum alignment and the water topics focused upon during the online expert sessions as key Australian water challenges and water health research foci.

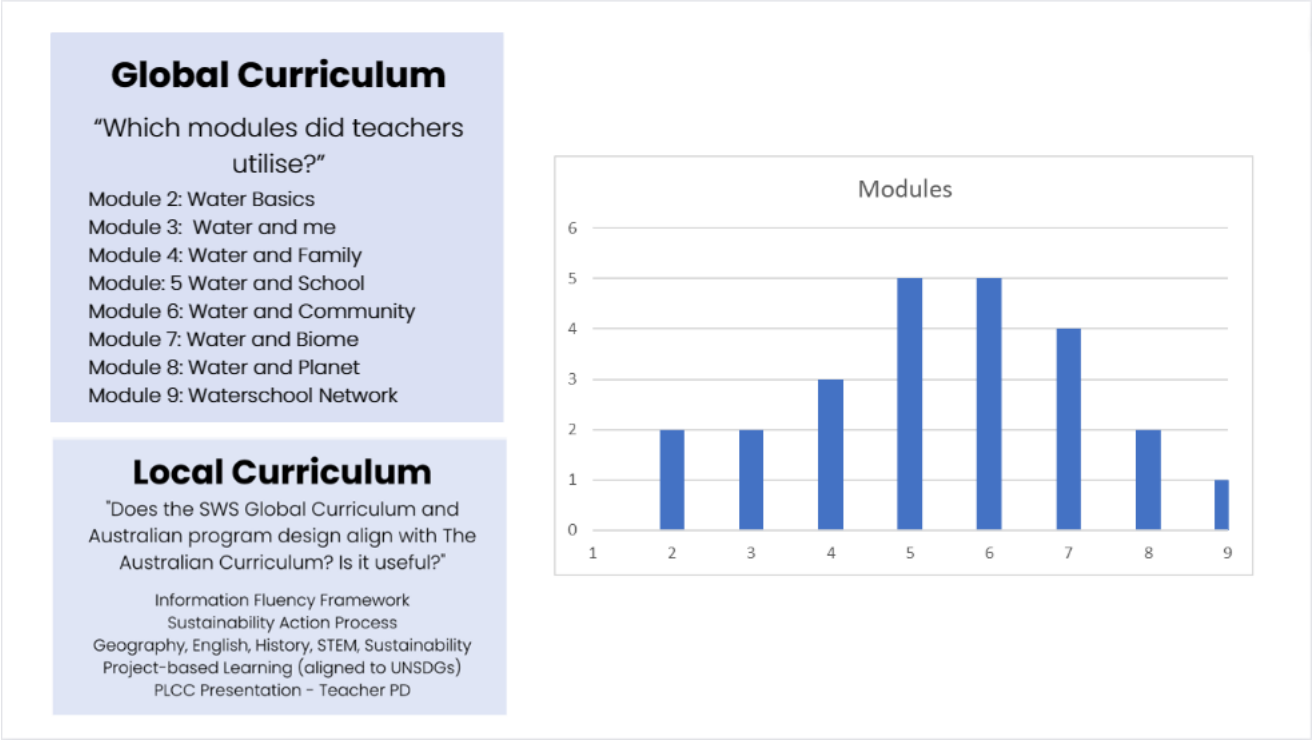


Figure 9: Lead Teacher utilisation of the SFWS Global Curriculum modules during the 2023 SFWS Australia program.

Water education – Student learning outcomes

Students from 13 of the 15 participating schools (including the 3 audience schools) completed the Student Questionnaire for the 2023 SFWS Australia program (n=86). Every student was able to identify something they had learned about water during the 2023 SFWS Australia program and could recall the key takeaway message or call to action from their peer-teaching workshop. Examples of student learning outcomes are included in the following list.

Student learning outcomes

- Thailand has a lot of water but its polluted [and that] we can filter water with basic materials.
- About how many different countries have different ways of accessing water, and what they have to do to use a certain amount of water.
- Raingardens are extremely useful for filtration and that only 1% of Earth's water is drinkable.
- That storm water is polluted sometimes.
- Water is a key factor in life.
- That not all countries are as lucky as us and don't have clean safe water to drink.
- I learnt more about water filtration.
- Water scarcity, conservation and the benefits of rain gardens.
- I didn't know how hard it was to get water in other countries.
- That if dirty water is boiled it can be drinkable.
- That Mexico City sunk lower because all of the ground water was extracted.
- I learnt that by making rain gardens to conserve water, you save tonnes of water and filter lots of contaminated water too.
- On how water [a]ffects other places in our country and how bad littering [a]ffects the planet.
- It is more vital than people think.
- The current state of pollution in water.
- I didn't know how many animals are endangered because of poor water quality.
- That many people all over the world die and suffer from poor water quality.
- Pollution greatly effects aquatic life.
- Much of the worldwide water wastage is a result of our negligence.
- The real difference between clan and unclean water in our environment.
- Different ways it is polluted and how it can be prevented.
- The ways water is wasted.
- Mulch keeps the water in.
- That the average shower in Australia is 7 minutes [and] that shower water takes 19 seconds to warm up to a comfortable temperature so you lose at least 2 litres of water.

Student calls to action

- We wanted our audience to be very mindful of our everyday water and to make sure we do little or big things to save water.
- To not to pollute in water or litter on land as it may result inedible food and water.
- Pick up any rubbish you see on the floor to help the water/ skip a straw save a turtle!
- I wanted them to tell others their friends [and] family about the water and how they should take care of earth's waters.
- Spread the word about hydropower and how it is the most sustainable energy source.
- Mulch, plant more bush tucker.
- Save water for we only have a little left.
- We wanted them to remember our workshop to stop water pollution.
- We want our audience to take back the message of pollution. How it corrupts our water. And how it cripples our ability to sustain. We wanted for our audience to understand how THEY can help defeat the problem of pollution through simple steps.
- We wanted them to take 3 minute showers.
- To see how less fortunate [some countries] are and how they have a small certain limit to spend on water.

Student Voice – Confidence to communicate key water messages

Of the 86 students surveyed, 87% were ''Confident'' or ''Very Confident'' in their ability to speak to their peers about water challenges and how to overcome them. In contrast, 81% the same student cohort felt ''Confident'' or ''Very Confident'' speaking to adults about the same information.

This is expected and shows that peer-teaching is a great starting point to build positive communication experiences before encouraging students to initiate community education and collective action mode. It is important to note that the "Not Confident" ratings (19%) were from students attending a remedial special needs class (4), from a school that did not present at an event (3) or attend a small, secluded school in a regional area (3). Therefore, they may have less experience with public speaking and inter-school interactions which may have predetermined their response.

This shows the importance of the peer-teaching events included in the SFWS program, to provide such opportunities to students who may not otherwise have them. Though they may be less confident sharing key water messages, these students likely spend more time in nature and may better understand local water systems and challenges compared to urban schools. Therefore, their inclusion in the program is crucial to provide a platform for them to build their confidence in sharing their inherent water knowledge.

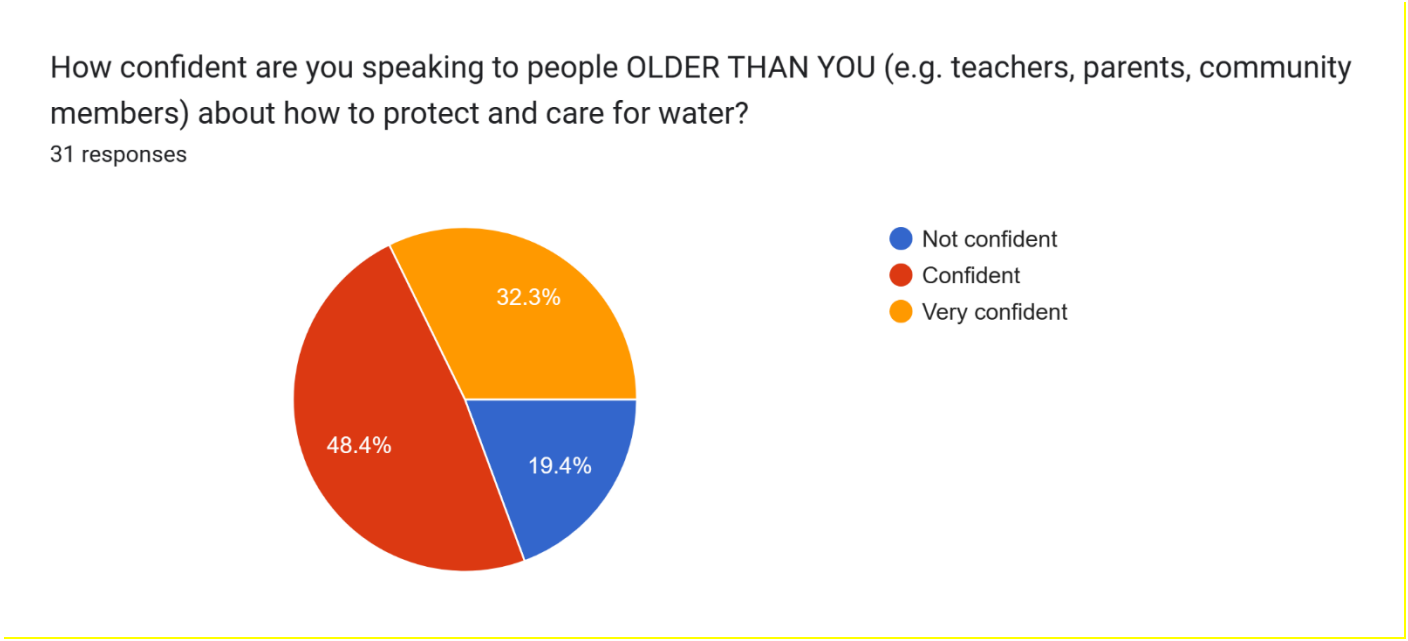


Figure 10a: SFWS students' confidence level to speak to adults about how to protect and care for water.

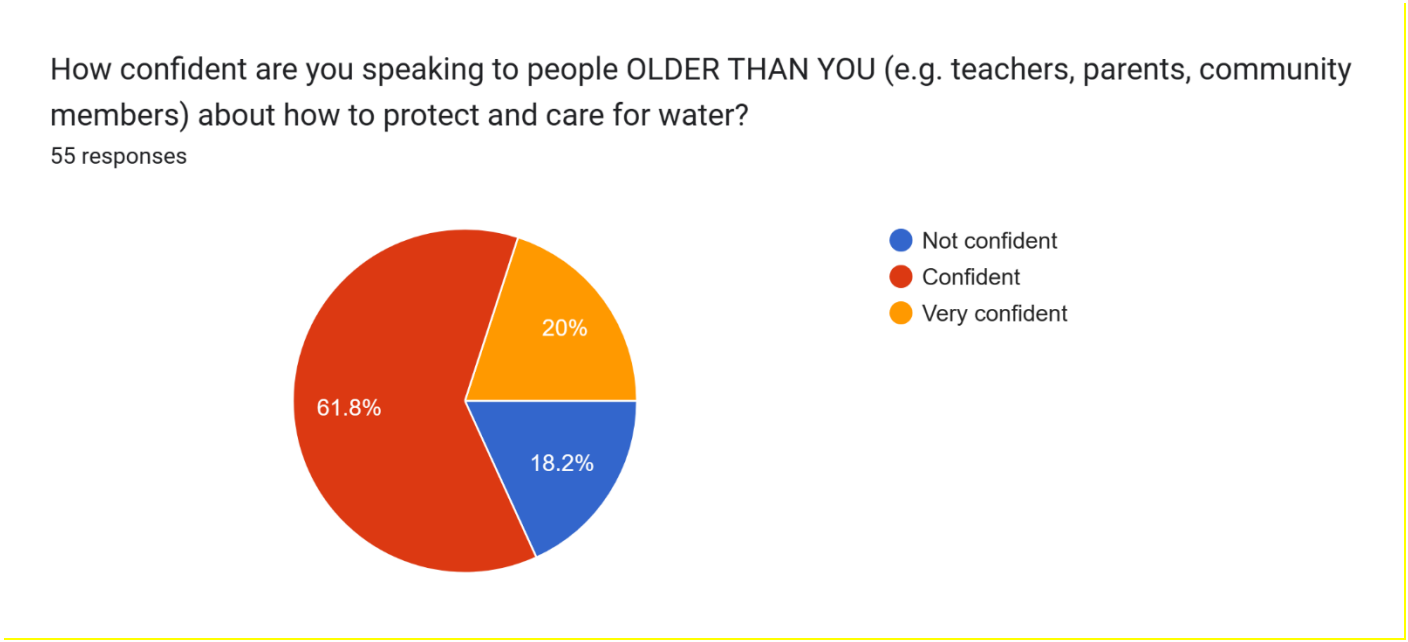


Figure 10b: Audience students' confidence level to speak to adults about how to protect and care for water.

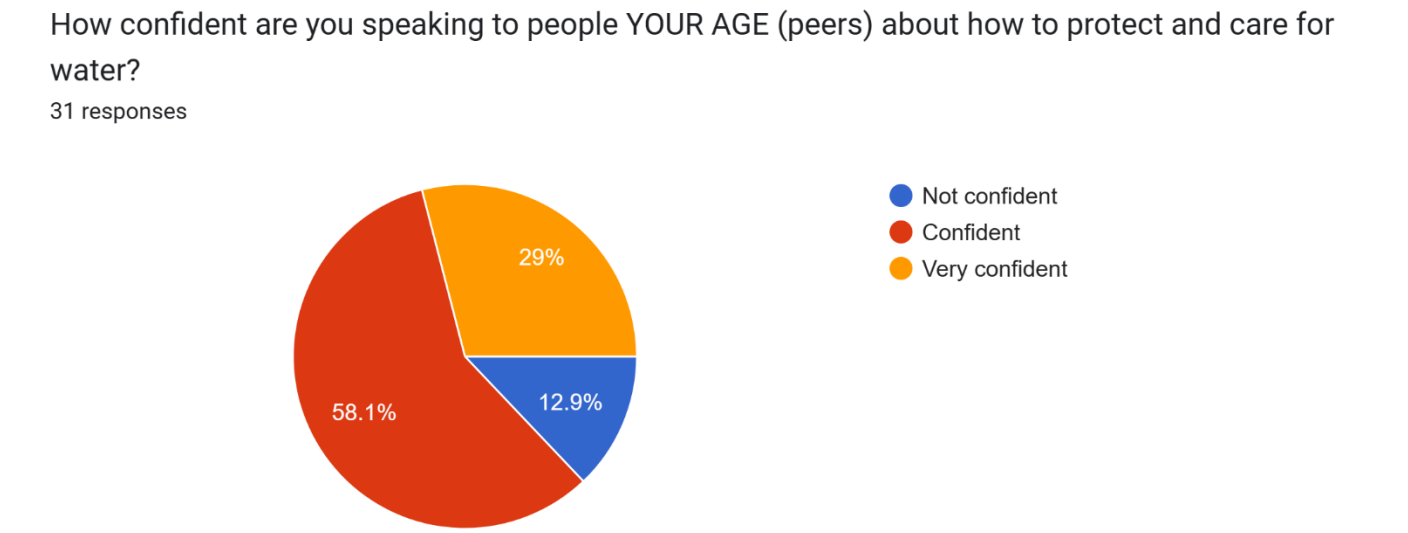


Figure 10c: Audience students' confidence level to speak to peers about how to protect and care for water.

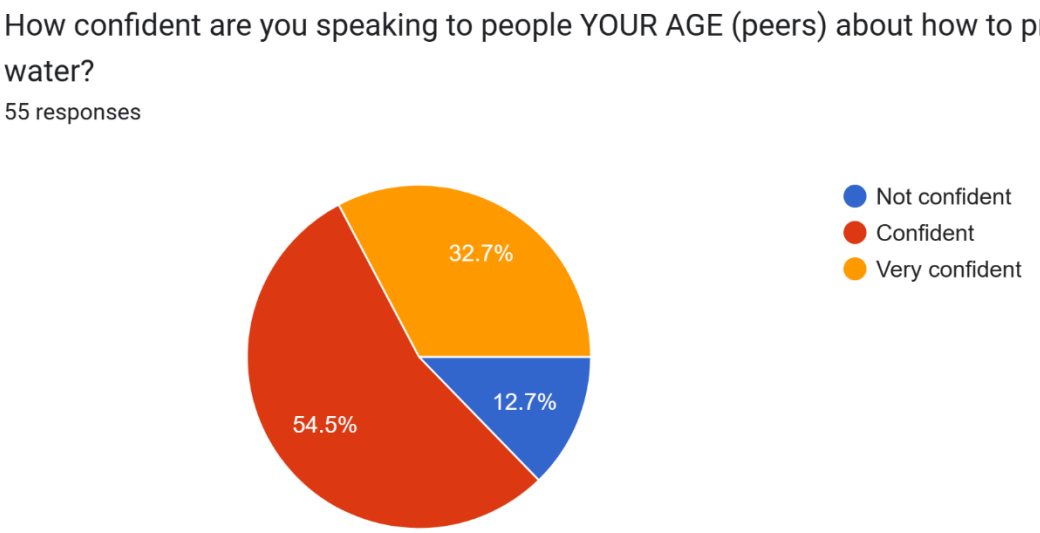


Figure 10d: SFWS students' confidence level to speak to peers about how to protect and care for water.

Behaviour Change – water usage and protection

Both teachers (n=13) and students (n= 86) were asked questions about changes in daily water-related habits throughout the 2023 SFWS Australia program. Keeping shower time below 3 minutes was a key behavioural change for both teachers and students, with slight changes in other habits such as turning off the tap while brushing teeth and avoiding single-use plastics. Students were asked a sub-set of behavioural change questions which were most relevant to their daily habits and were feasibly within their decision-making power to make a change. It is important to note that some students were not asked the baseline questions in the survey as they completed the incorrect one (completing the audience school survey instead of the participating school survey). Therefore, the comparative data for the baseline data is skewed but is accurate for post program data as represented in Table 5.

Water-related Behaviour	**SFWS Teachers Before (n=13)**	**SFWS Teachers After (n=7)**	**SFWS Students Before (n=31)**	**SFWS Students After (n=31)**	**Total Students After (n=86)**
I turn the tap off while brushing my teeth	100%	100%	90%	93%	
I keep my shower length less than 3 minutes	21%	57%	29%	58%	
My clothes are washed in cold water	85%	86%	38%	45%	
I avoid single use plastic bags, straws, and cutlery	92%	100%	-	-	
I use my own water bottle instead of plastic water bottles	92%	100%	93%	97%	
I reused water in my bottle for gardens	-	-	3%	3%	
I have a dishwasher at home	78%	78%			
The dishwasher is always full before using it	85%	86%			
I used the dishwasher	-	-	3%	3%	
I used the dishwasher and my shower limit is about 5 ½ minutes	-	-	3%	3%	
I check for water leaks	-	-	3%	3%	
I use the half flush on the toilet	-	-	3%	3%	
I have shorter showers but more than 3 minutes	-	-	3%	3%	
I use environmentally friendly household cleaning products	49%	79%	-	-	

I have a water-saving showerhead at home to minimize water usage	56%	64%	-	-	
I plant native/drought tolerant plants in my garden	42%	71%	-	-	

Table 5: Water-related behaviours carried out by teachers and students prior to (Before) and following (After) the 2023 SFWS Australia program.

Program Value – Teachers and students

Lead Teachers (n=13) were asked which program component held greatest value for their school-specific context, curriculum learning, values, and goals. Multiple program aspects were highlighted as valuable, with the online teacher training, facilitated classroom workshop planning sessions, on-going support, and the peer-teaching events featuring several times. Student voice, leadership, and agency, facilitated through the workshop creation and peer-teaching events and firmly embedded in the Australian curriculum, was a particularly valued component of the program. Therefore, year-long training and educational support from a variety of stakeholders as well as opportunities for inter-school peer teaching will remain program emphases for 2024.

Unexpected outcomes from participation in the program included student adaptability to make changes to improve their workshops, the support from various stakeholders, ability to engage their peers, student's commitment to the project, the level of water knowledge accrued, passion to find solutions, ability to collaborate as a group, presentation standard and knowledge retention post-event, sharing of skill sets to build the workshop, and the level of empowerment students gained from having total agency over workshop topic and activity creation.

Lead Teacher summary statements about the 2023 SFWS Australia program are included in the Teacher Testimonials section of this report.

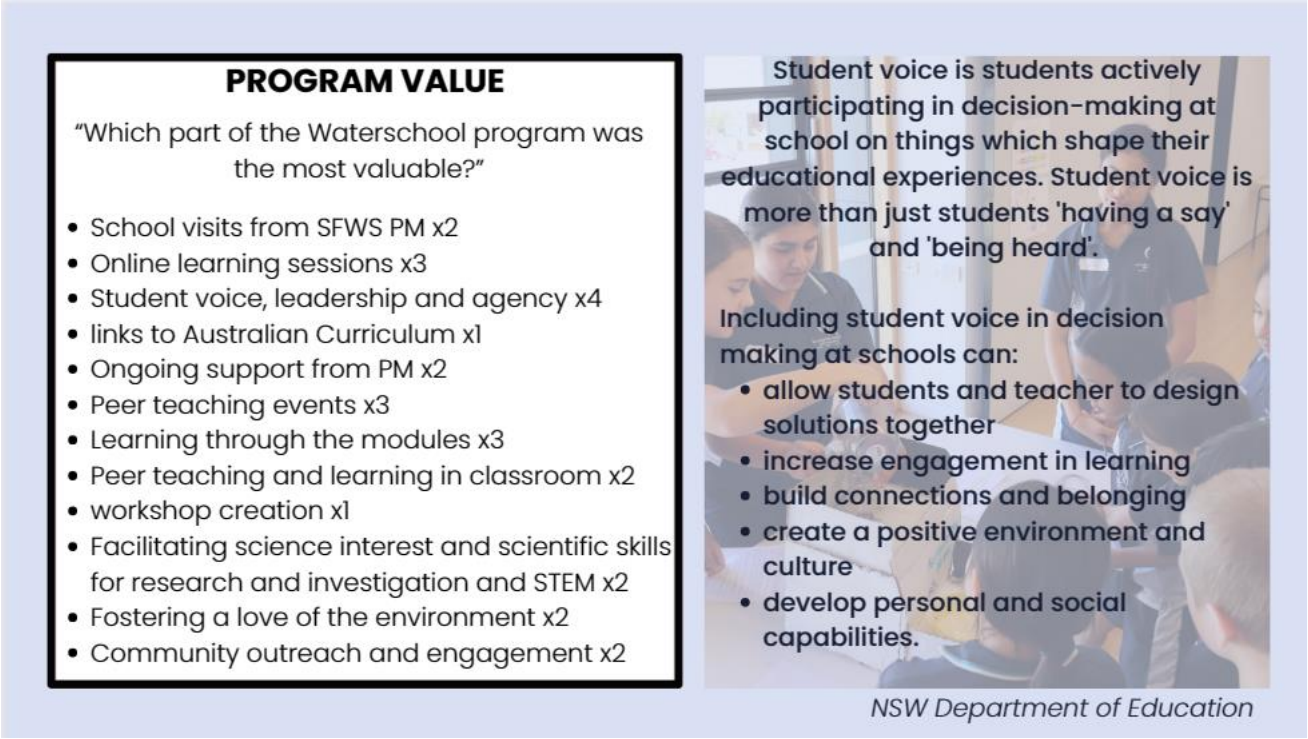


Figure 11: Most valuable program components as indicated by Lead Teachers (n=13).

Students (n=86) were asked to describe their favourite part of the 2023 program. Learning new information about local and global water systems, challenges and solutions, creating workshops (especially the creative activities and

interactive elements), being able to take agency over their learning, socialising with peers from across the school and state, and attending the peer-teaching events were student favourites.

Favourite program component	Count
Water education and research	25
Workshop (activity) creation	29
Teaching water information	12
Contributing to bigger picture/ambassadorship	2
Teamwork and inter-school socialising	19
Peer teaching event	9
Making a change/difference to the world	3
Interaction with and learning from Chief Scientist	1
Hands-on or interactive activity eg gardening, games, STEM experiments	7
PM visit/education/support	2
Everything about the program	2
Don't know/Unsure	2

Table 6: Count of favourite component of the 2023 SFWS Australia program as indicated by participating students (n=86).

Program Improvement – Teachers

Lead Teachers (n=13) reported several, and at times opposite, ways to improve the SFWS Australia program in the future. Many of these suggestions for improvement were school based such as changing roles or workloads and class sizes, or due to geographical locations of the schools, which can be partially addressed through the program design for 2024. Other improvement suggestions such as clearer time frames, bringing back the one larger Flagship Event, clearer and more structured expectations of the program, more examples of workshops, and the three-year commitment issues will be addressed in the 2024 program and recruitment drive.

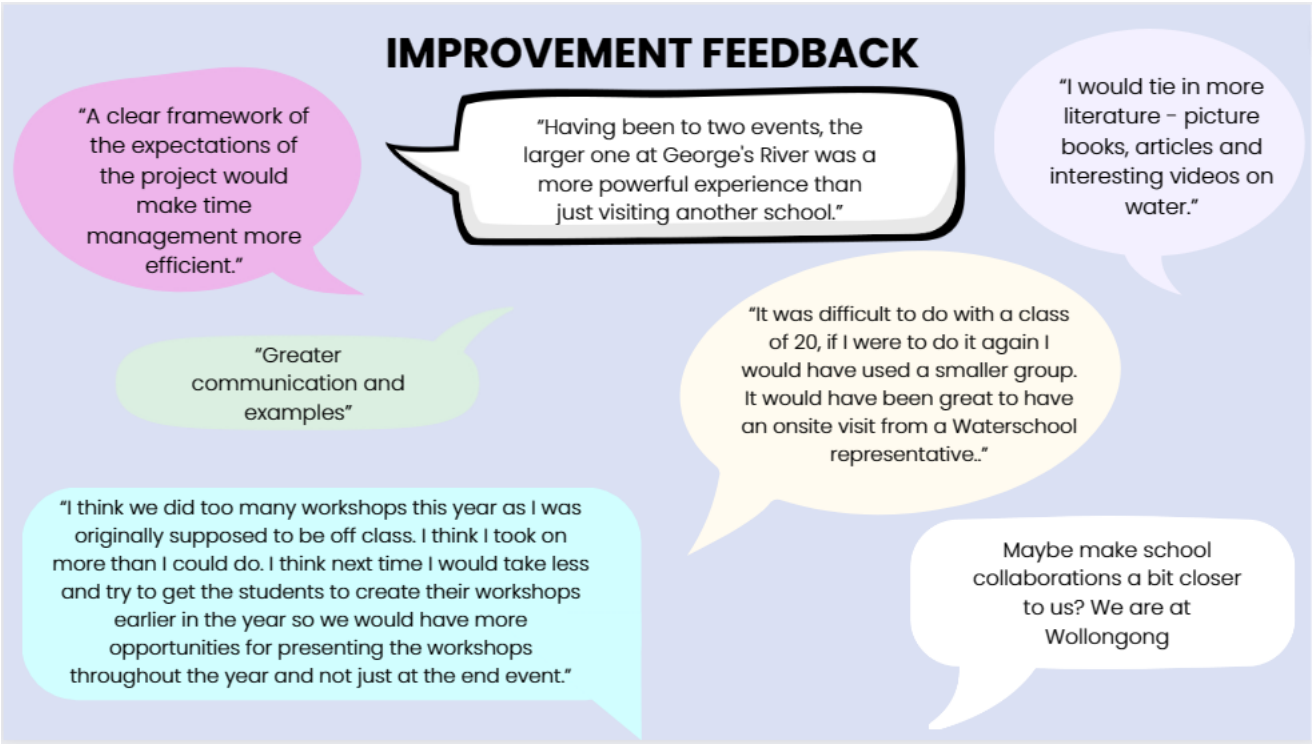


Figure 12: Program improvement suggestions as described by Lead Teachers (n=13).

Program Outreach and Partnership Interest

In 2023, as Earthwatch staff were again able to visit existing and prospective partners, key community stakeholders and local knowledge holders, effort was again put into strengthening these relationships and expanding to create new ones.

Relationships were strengthened and built across Earthwatch spheres of influence, from local to global. Our Head of Education met with existing and prospective partners across Victoria, New South Wales, and State and Federal Government. The Program Manager strengthened relationships with the other 8 SFWS Program Managers across the globe, NSW Department of Education, multiple City Councils, Environmental Education Centres, and with local Aboriginal Elders. Three new schools, including 2 ocean-side schools distributed along the East Coast of NSW, were onboarded.

Overall, there was a high interest in the SFWS Australia program in 2023. Due diligence will remain an important exercise to determine best prospects for expanding the program in Australia and throughout the Pacific.

School Retention and Program Growth

As an additional indicator of the program's value and design efficacy, school retention was measured between 2021 and 2022, and estimated for 2023 based upon applications received as of 31 December 2022. Retention rate was calculated for NSW-based schools only and determined to be the proportion of schools directly involved in the program for at least one year that chose to be involved again for another year. One teacher has been granted permission and support from their principal to be a mentor to other teachers and schools in the program in 2024, such is the success of the program in their school. The 2023 retention rate is 9 out of the 12 schools who remained in the program until the end of 2023.

To date, we have received 12 confirmed applications for the 2023 SFWS Australia program and 3 other applications are awaiting principal approval from schools in New South Wales. There have also been 3 international applications. Three schools have asked to be audience participants again with the view of being program participant schools in 2025 and a further 2 schools will apply in 2025. One teacher has elected to implement the program and both schools that she works at which is a great testimony to the strength of the program and its subsequent achievements for students and schools. Further funding is required to facilitate this number of schools and to facilitate schools across several States; therefore, it is suggested that only 15 schools in NSW will be selected to participate according to strength of application for the 2024 program. Also, of the schools surveyed (n=13), 86% would like to be involved in a larger Flagship Event, hosted by SFWS in 2024. This would be subject to funding and would also require school empowerment grants.

Following their positive peer teaching events experiences, staff from Councils, EECs, and other community organisations have indicated they will include SFWS Australia program information in their Term 1 communications with schools. Therefore, we anticipate more program applications will be received in January of 2024.

Year	# Schools applied	# Schools participated	# Returning schools	Retention rate (%)
2021	8	8	-	-
2022	17	11	6	75%
2023	22	15	11	100%
2024	18	12	10	80%

Table 7: School retention rate since SFWS Australia program inception in 2021.

Alignment with the United Nations Sustainable Development Goals

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Target 4.1: By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes

Target 4.5: By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

Target 4.7: By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

In 2023, 383 students and 26 teachers from 15 schools with 6 different school types participated in the Swarovski Waterschool Australia program. The student cohort was aged between 9 and 14 years and included students from 19 different ethnicities. Lead Teachers from 57% of the schools indicated Indigenous students were included in their 2023 program cohort, and 24 students with a disability participated fully in the program due to the student-led creative approach and overall flexible design. Of the sub-set of student participants surveyed, 61% were female and 39% were male. All students surveyed knew the name of the Traditional Custodians (First Nations peoples) of the land their school resided upon.

All Lead Teachers were provided with online teacher training to ensure equal access to technical and cultural water-related information. The Water Health Series sessions were hosted by 3 Earthwatch environmental and humanitarian experts, and 3 Connect to Country sessions were hosted by Aboriginal Elders to connect water to Indigenous art, language and Creation Stories. Teachers utilised the Global Curriculum to align learning outcomes with various NSW curriculum components such as Geography, English, History, STEM, and Sustainability. The full SFWS Australia program design met the learning outcomes of entire assessment frameworks, including the Information Fluency Framework, the Sustainability Action Process, and the UNSDG framework as part of project-based classroom learning.

All schools, regardless of geographical location and socio-economic status, were provided equal access to teacher training, Environmental Science and Indigenous experiences, workshop planning facilitation, Program Manager support, school grants, and local mentorship throughout the year.

Forty-one peer teaching water literacy workshops were created and presented by students to an additional 1,167 students as well as teachers and guardians within local school communities. Students created 25 digital and printable learning resources to accompany their workshops, to share their key water messages and educational activities with the global Swarovski Waterschool cohort as an act of global citizenship.

Of the sub-set of students surveyed, 87% were Confident or Very Confident in their ability to speak to their peers about water challenges and how to overcome them following program completion, while 81% felt Confident or Very Confident speaking to adults about the same information. Thirty-six percent more Lead Teachers keep their shower time below three minutes post-program, after being educated about the amount of water used per minute during student workshop presentations at peer-teaching events. Three schools participated in Flagship event, with 194 attendees. Fifteen workshops were presented on the day, with a Welcome to Country, Water Ceremony and Ochre Ceremony from Wangal Elders to open the event and a Water Pledge taken by each school during the closing ceremony.

Goal 6: Ensure availability and sustainable management of water and sanitation for all

Target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

Target 6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

Target 6.6: By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

Target 6b: Support and strengthen the participation of local communities in improving water and sanitation management

Several student peer-teaching workshops focused on educating students and their school communities about how to conserve and protect local water supply. Key messages were to ensure rubbish was recycled or disposed of correctly instead of being discarded and ending up in the ocean, to install rain gardens to naturally filter pollutants, to bring reusable water bottles to school to reduce single-use plastic waste, to not waste water (and a board game called Wise With Water), and to encourage households to reduce shower times to less than 3 minutes to save water.

The Water Health Series included information about pollutants such as microplastics and household chemical usage, as well as the impact of urban development on local water quality especially after torrential rain. Tidal wetlands and mangrove habitat were also presented as underappreciated nature-based solutions to challenges such as pollution, erosion, and carbon emissions.

Two examples of digital and print educational resources produced by participating schools are included below.

Example 1: Waste wise Water board game by St Patricks Catholic Primary School

Students created the "Wise With Water: A Game For Water-Wise Kids" board game where questions relating to water conservation must be answered correctly in order to progress and collect miniature water bottles and passports.

Example 2: E-Book and Interactive Gameshow by Holsworthy High School

https://new.express.adobe.com/published/urn:aaid:sc:AP:9d850c9f-f812-471a-abca-3fee7f085037?promoid=Y69SGM5H&mv=other

Students from the support unit put together an e-book. The pictures of the diorama accompanied the support unit's work for the year – "they are very proud of what they have produced."

The students also created a gameshow (see below pdfs online links), the game itself is interactive and the presenter notes accompany the overall game/questions.

HEAL Templates (earthwatch.org.au)

Presenter Notes (earthwatch.org.au)

Goal 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development
Target 17.16: Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries

Target 17.17: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships

Sharing knowledge and expertise

The Water Health Series connected Lead Teachers and their support staff to Earthwatch Chief Scientist, Scott Wilson, Senior Wetlands Program Manager and Co-Director of MangroveWatch, Jock McKenzie, and Chief Development Officer, Stephen McDonald. Latest research and decades of collative research outcomes and insights were shared, bringing teachers into the conversation with Live Q&A opportunities to give context to their local water environments and to engage in discussions around creative solutions and how to best communicate research findings to students in the classroom. The Program Manager contributed water-related insights and communicated various sustainable and regenerative concepts and lifestyle habits during school visits, workshop planning and practice presentations.

Technology

Teams was utilised to ensure all teachers could gain access to the online teacher training sessions regardless of location within New South Wales. Assistance was provided where necessary for Elders to join these online sessions, to share their Indigenous knowledge and stories. School check-ins and practice presentations were also held online with the Program Manager to maintain momentum throughout the year and to fine-tune the workshop structure and presentation style. Digital educational resources were created by schools for mass distribution and viewing, while educational resources such as Minecraft helped students to envisage and co-create a more sustainable and water savvy school, home, and community.

Public, public-private and civil society partnerships

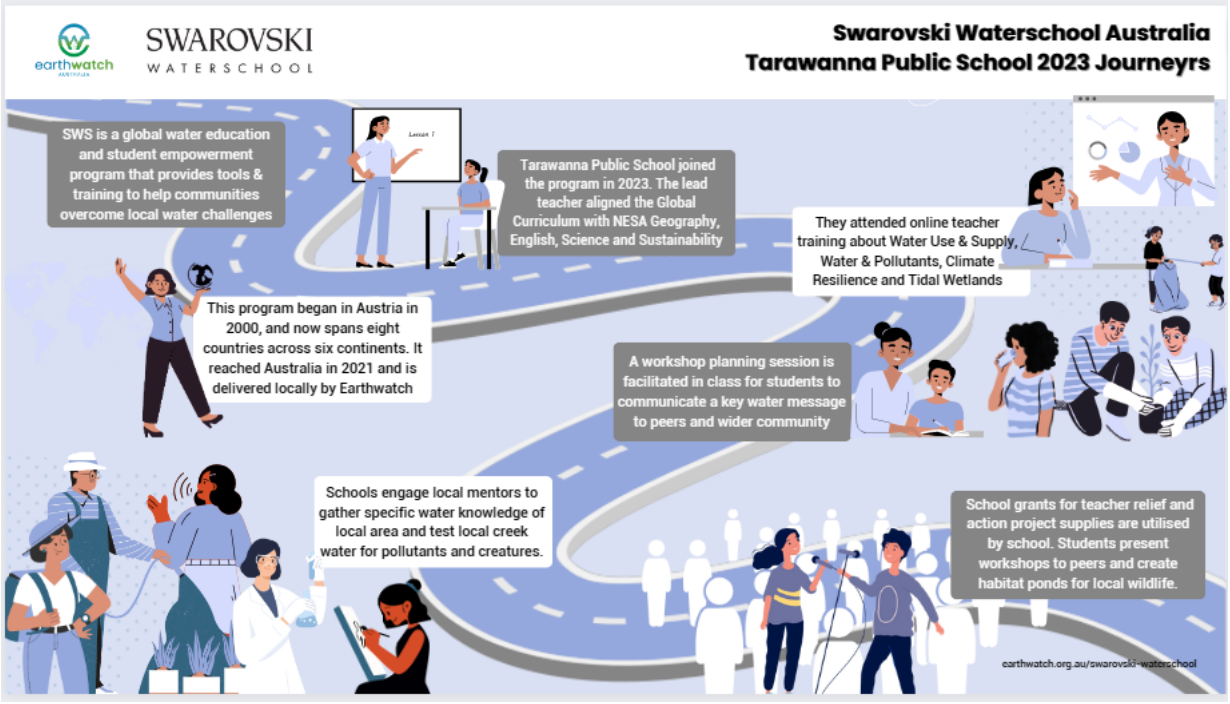
2023 SFWS Australia Peer Teaching Events

The 2023 Swarovski Waterschool Australia Flagship Event brought together students, teachers, educators, Council members, NSW DoE Directors, and Swarovski volunteers from across the State to listen to student voices and gain a wider understanding of Australian fresh and saltwater challenges. The various locations the state of NSW gave students, teachers and guests access to hands-on scientific, flora and fauna experiences, enhanced the nature-immersive element of the events, met all Department of Education requirements for child safety and well-being, and ensured program funding supported local environmental education organisations as well as local event suppliers. Aboriginal Elders were invited to share their knowledge and expertise on the days, with culturally appropriate practices included such as bringing along a family member and asking for photo and video permission.

Case Studies

The following infographics outline the year-long journey for select participating schools. It is evident the SFWS Australia program design allows schools to empower students and communities in their own creative and diverse ways by playing to their strengths and aligning with school values, curriculum outcomes and (where applicable) existing environmental projects. The design also allows students to select a water topic that is unique to their local water context, which encourages on-going connection with nature and with nearby Elders and environmental mentors and helps to achieve collective on-ground action as student water challenges are likely to be local community water challenges.

TARAWANNA PUBLIC SCHOOL



Tarawanna Public School is situated near Wollongong in southern NSW. With no other schools participating in the SFWS program in the vicinity, Tarawanna elected to do peer-teaching workshops in house and create an action project at the school. Students surveyed the local creek which runs adjacent to the school boundary for water quality, habitat for native faunal and aquatic species and invasive faunal and aquatic species. It was noted that native water dragons regularly seek shelter in the school grounds. Students decided to create habitat ponds for local wildlife; to drink, eat and seek shelter and habitat. Two groups were formed. One was headed by Phoenix (F) and the other by Noah (M). Phoenix's group watched the path of the water dragons through the school and selected a sheltered spot to install a prefabricated pond and create a habitat for them and other native species of birds, reptiles

and mammals and constructed the habitat site with grant funds. This group created a peer-teaching workshop that was presented to the junior classes of the school, who made smaller ponds from recycled materials to take home. Noah's group chose to research natural ponds and how they were advantageous in contrast to prefabricated ones for natural selection by fauna and aquatic creatures. An area of the school, adjacent to the creek has been chosen construction was set to begin early December, but unseasonal weather patterns have put a hold on the construction. Noah's group also created a peer teaching workshop which involved the junior students learning about native ponds or "watering holes" and constructed their own out of clay and natural materials to plant around the school for small creatures. Both these workshops were presented again to middle and senior classes during a visit from the Program Manager in November.

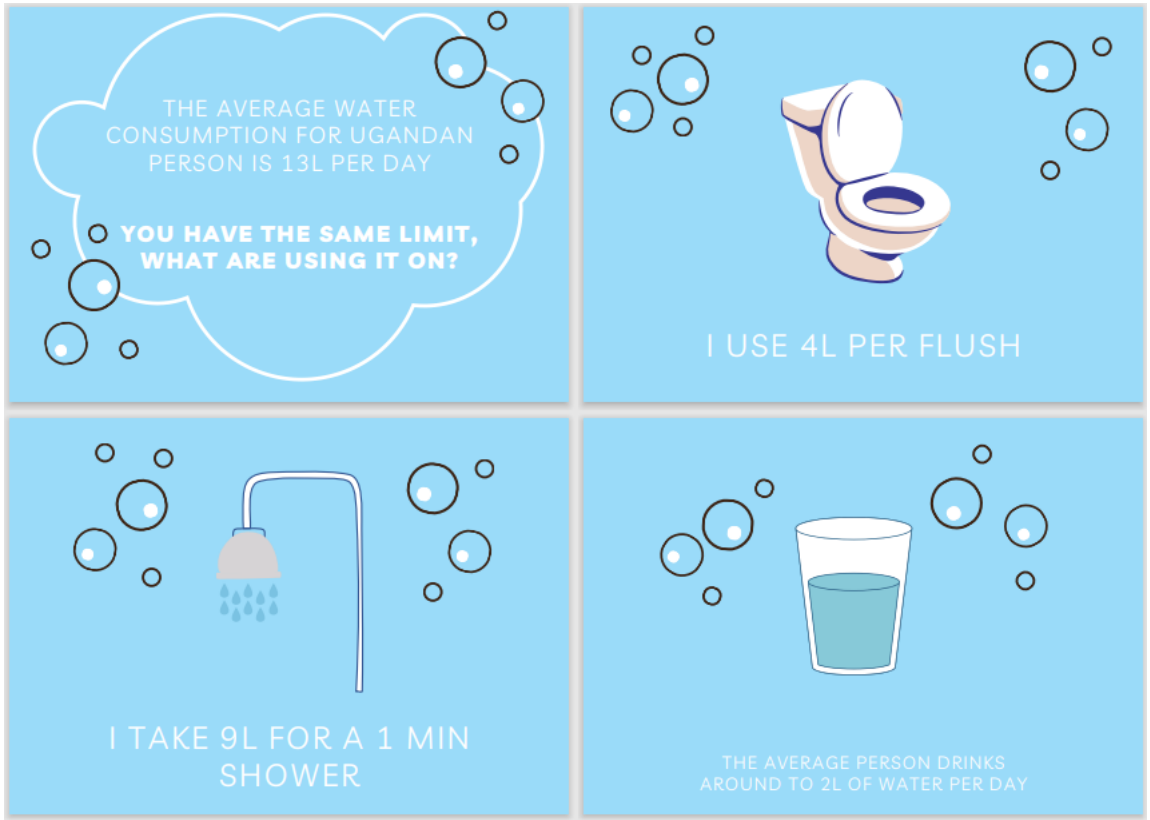
The success of this program during 2023 has prompted the lead teacher to enrol her second teaching school into the program for 2024.

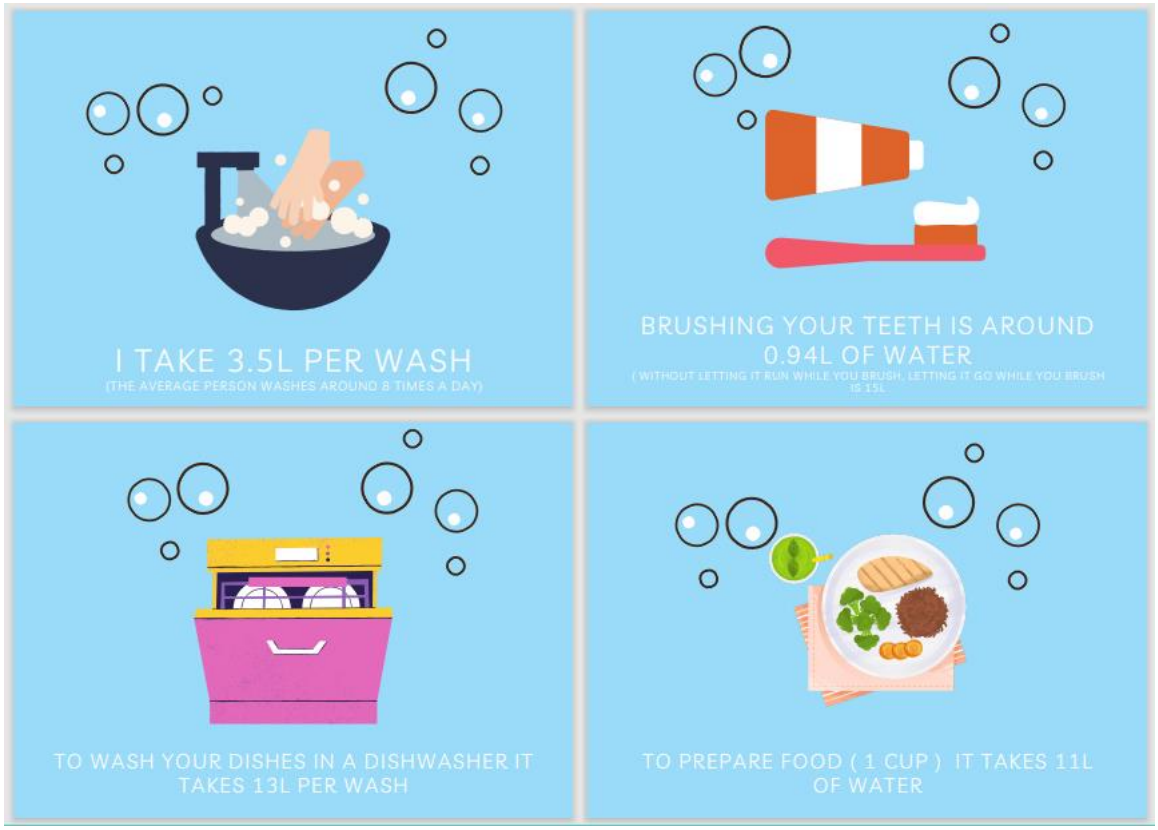
https://youtu.be/H7noA_0Ope0

OUR LADY OF THE ASSUMPTION CATHOLIC PRIMARY SCHOOL

Our Lady of the Assumption Catholic Primary School was the host school for this year's Flagship Event, which was in North Strathfield, NSW on 31st October 2023. Student MCs ran the event and 15 workshops from 3 schools and the Earthwatch Chief Scientist were presented. Videos of each workshop were created for use by the Global SFWS community. A total of 5 workshop videos and 5 accompanying resources have been made available at this time by the school.

https://youtu.be/lOBTqK8rlTI





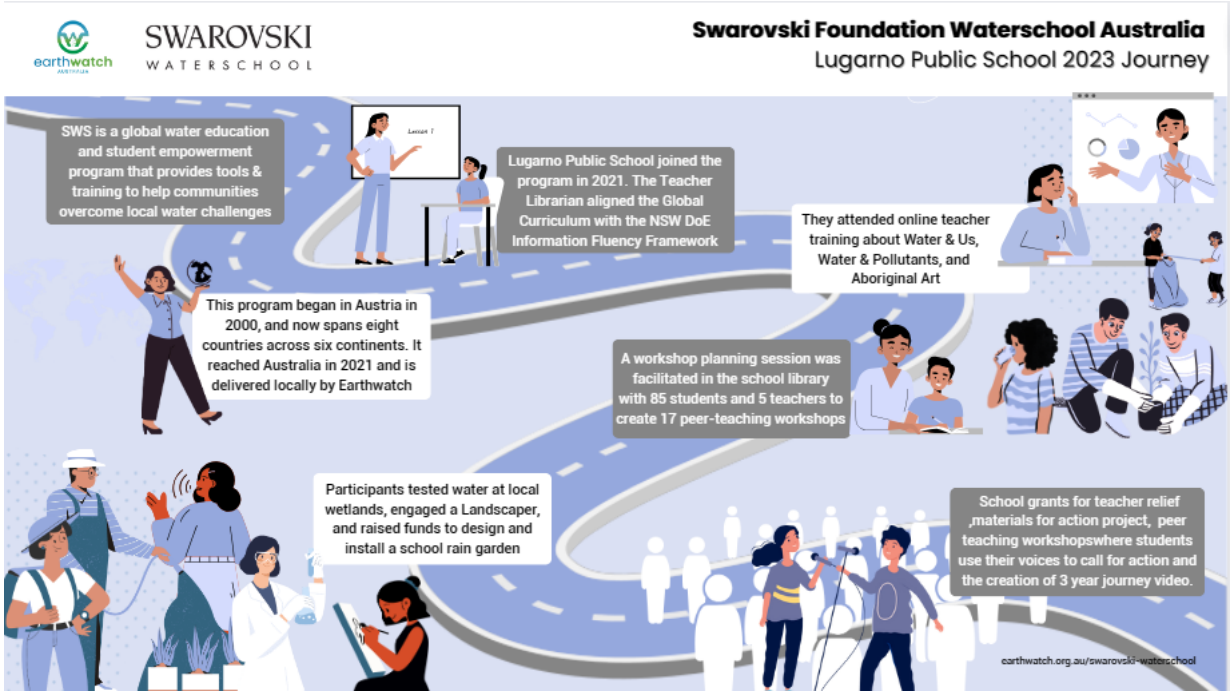
A video of the students discussing water was also created and used by the Program Manager at the global SFWS 10th Anniversary event in Wattens, Austria, in June 2023.

[Swarovski Foundation Waterschool Australia: OLA Global Water Discussion - YouTube]

LUGARNO PUBLIC SCHOOL

Lugarno Public School completed their three-year journey as a SFWS participant at the end of 2023. Lead teacher Leonie invested a large amount of time implementing the program in her school and has been chosen to be a teacher mentor for the 2024 participating schools, with the support from her principal. In 2023, Lugarno chose to implement an action project, building a raingarden, and create a video about their school's three-year journey with the program. Unfortunately, the raingarden was not installed by the end of 2023 but will be installed in early 2024 (see explanation email below from Lead teacher in December 2022) and the journey video will also be completed then too.

"*Our rain garden location is decided. We have obtained quotations for soil, crushed aggregate and edging. We have a rain water tank that needed to be reconnected and have had professionals out to assess. They have ascertained that there is an electrical fault and that they can not fix until the school holidays. This has meant the building of the rain garden needs to be done after their scope of works is completed. We have decided that this may be a fortunate occurrence as planting new plants in December would mean that there is no one here for six weeks to water or maintain. Therefor we are advising you that it will be completed in Term 1, 2024. I will supply a video of the day, we have also contacted Lugarno Progress Association to assist as well as our school community. We will also install a plaque acknowledge the SFWS program and that this was the culmination of a three year program.*"



SWAROVSKI WATERSCHOOL

earthwatch

2023 Swarovski Waterschool Australia Program

- Video Workshop Plan -

By developing a peer-teaching water education video (Waterschool workshop), you are not only increasing your own understanding of water-related issues but you are sharing this valuable knowledge with others. Thank you for your dedication because together we can make a difference.

Use this workshop plan to help structure and organise your workshop video. When you are developing your workshop activity, think about the types of activities you like doing and what keeps you interested when you are learning something new and how this activity can be transferred back to the classroom. Use these activities and ideas as the basis of your workshop video.

Providing as much detail as possible will allow the Swarovski Waterschool Australia team to assist and support you with everything you need.

Length: Workshop Video to run no more than 10 minutes total (excl. audience doing the activity)

School: Lugarno Public School Enrichment Group Stage 3	**Expert mentor:** Hannah Gentle, Leonie Dufty This is someone who is helping you to gain knowledge/resources for your workshop
Workshop Video title: Try for something short and snappy; alliterations work well!	Garno's Grand Garden (Garno is Lugarno Public School's Mascot)
Workshop blurb: This is the blurb that will be used as a text summary to accompany your video submission Approx. 50-70 words	Our focus at Lugarno Public School is to bring to fruition the culmination of three years work by building a 'Rain Garden' on our school grounds. Over the past three years we have learnt about filtration and water pollution in our local waterways and our 'legacy plan' was to build a rain garden that would filter pollutants before reaching the Georges River. This workshop will provide a model of the actual rain garden designed by LPS students. This will be the step prior to commencement of our action project to build *Garno's Grand Garden*.
What is your take home message? This may be 2-3 things that you want your audience to KNOW or DO differently after your workshop	Our messages: *Raingardens filter stormwater runoff.* *Raingardens are asthetically pleasing and useful to our environment.* *Each and everyone of us can make a difference.*
Outline your groups roles and responsibilities Play to your strengths and passions. What are you good at, how can you best contribute to the group?	**Nine students – three from each class** Group one: - **Technicians** in charge of video, technical issues and digital presentation. Group two: **Creative** a jingle or song to introduce our topic. This may be a poetry recital

	Group three: **Builders** these students will be building a large scale model or what we hope our raingarden will look like.
What equipment will you require to film your video?	We are looking into costumes (native plants and bush tucker) Laptops for digital presentation Green screen Microphone Vimeo – film editing and producing. **MODEL** • Large board for base • Wire meshing for landscaping • Paper mache • Clay • Paint • Glue • Plants • Soil • Rocks • Signage

What types of tools will you be using to bring your video to life?	Photos	Voice overs	Music	Powerpoint
(These are only suggestions – be creative!)	Model	song		

Your Waterschool workshop video should be broken down into SECTIONS:

Film the introduction (3 minutes): Introduce yourselves, your School, and your local water challenge. Explain why your water topic (related to your local water challenge) is important, then share your key messages about this topic, and what people will learn from your workshop.

Film the step-by-step activity (2 minutes): Explain your Activity step-by-step, using clear directions and including a description of all the equipment required. Do the activity yourself as you are explaining.

Film a call to action (30 seconds): Direct other students to spend 15 minutes completing the Activity from wherever they are, remember to direct them to pause the video while they complete the activity!

Film a direction to reflect on the activity (30 seconds): Ask audience to reflect on how the activity went, what they were thinking after completing it, and how it might relate (or not relate) to water in their school/community. Give them 5 minutes to discuss, remember to direct them to pause the video while they do!

Film a water ambassador message (1 minute): Use your voice to tell the audience what they need to KNOW or DO differently after this workshop to better protect and care for water and the environment. Give an example of something SPECIFIC they can share or do e.g. pick up THREE pieces of LITTER at your SCHOOL has a number, an item, and a place that is easy to understand.

Need help? Get in touch – hgentle@earthwatch.org.au

2023 Workshop Plan for SWS Australia Schools

Film a final farewell message (1 minute): Thank your audience for listening, repeat important information, and end with a tag line or slogan so your water topic and related actions are fun and memorable. You can include a short poem, song or dance if this is a strength in your group! Note you will receive intro, outro, and holding slides to include in your workshop to help guide you. Please provide details of your Waterschool workshop in the sectioned text boxes below: The more detail you can provide here, the better!	
Introduction This is your chance to grab audience attention. Introduce yourself / your school and your water education topic – what you have been doing with water in your school or local community and/or how do you want to showcase ways to protect and care for water?	Our presentation is an overview of our journey in the Swarovski Waterschool Program spanning three years. We highlight Lugarno Public School as well as the students who actively participated in this transformative program. We acknowledge the nine students presenting as they are representing the entire Stage 3 cohort who all embraced the program. Our topic centres around raingardens, their purpose, and the benefits they bring to our local community and school. We emphasise the message of limiting pollution entering the stormwater before it reaches our local waterway the Georges River. To start our presentation, we intend to capture the audience by reciting a poem written by our students. This poem will enscapsulate our collective commitment to preserving and protecting our precious waterways.
Activity Activity should take other students no more than 15 mins to complete in their classroom. Explain and do each step. Include all important information.	As our activity for conveying our message is still under consideration, we have engaged in vigorous discussions to determine the most impactful approach. Several ideas have been proposed, and we are evaluating their suitability. One concept is to provide students with materials to construct their own "mini models" based on their school, visually representing the importance of raingardens. Another idea involves adapting an existing game, such as "golden child," to create a new version that illustrates how a raingarden functions. Additionally, we are contemplating the idea of having students write their own poems, aligning with the theme and conveying a similar message to the poem we have prepared. We recognize the significance of selecting an activity that effectively communicates our core message and engages the audience, and we are excited to finalise our decision in the near future. ***We may also do a combination for example a quick warm up game, followed by a hands on activity.***
Activity Tool Kit What will students need to complete your hands on activity in the classroom? Equipment List Resources: These could be printable PDFs and/or hyperlinks to more information	ACTIVITY Warm up game – balls, bean bags we will provide Model – cardboard lid from A4 paper boxes; clay, rocks, plants, soil (all provided) Poem: - pen and paper

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2023 Workshop Plan for SWS Australia Schools

Reflection, water ambassador message, and final farewell Make a script for these segments (reflection questions are on the holding slide). What is your water ambassador message? Will you create a tagline/slogan/poam/song/dance to finish the workshop as a final farewell? Include your script. Include a thanks for watching too.	Thank you for attending our workshop. We sincerely hope that you have gained valuable insights into the significance of raingardens, their essential functions, and their role in water conservation. As our three-year journey in the Swarovski Waterschool Program comes to a close, we have learned a profound truth: water is the most precious and scarce resource on our planet. It is our collective responsibility to actively conserve and safeguard the limited freshwater we have. Raingardens offer a tangible way for each of us to contribute and make a positive impact. By implementing raingardens, we can actively participate in the preservation and protection of our vital potable water resources. Let us all unite in our commitment to water conservation and take action to ensure a sustainable future for generations to come. Thank you for watching.

Swarovski Waterschool Video Submission

Please submit your videos and supporting documents before the end of Term 3

1. Video – no longer than 10 minutes filmed content (excluding audience completing the activity)
2. Equipment list, step-by-step instructions for students without access to video, links to supporting resources

Send both to hgentle@earthwatch.org.au

Thanks, and enjoy creating your Waterschool workshop!

Need help? Get in touch – hgentle@earthwatch.org.au

Workshop Template

LPS - Swarovski Foundation Waterschool Journey 2021-2023

A compilation of videos from LPS's journey over the past three years.

LPS - Swarovski Foundation Waterschool Journey 2021-2023 (vimeo.com)

Student Testimonials

Jacob, Our Lady of the Assumption Catholic Primary School

My favourite part was actually learning the facts about water and my country, and putting all that information into an engaging diorama. The process was fun and factual, and my team (Max, Albus and I), was able to work together to create something we all enjoyed to do.

Chelsea, The Nature School

I liked how we got to put together our own informative presentation to share with Bobin Public School [I think that's what it's called] and how we all got a part in it.

Lucia, Lugarno Public School

This is an amazing program and it should continue on for many years to come!

Sakina, Holsworthy High School

I liked the Swarovski Waterschool Project because it gave me and my peers an opportunity to try new things in Science and work together as a team to come up with a wonderful activity. I was very happy with the results and I would really like to see more things like this in the future.

Raymond, Meadowbank Public School

I had an amazing year learning about water.

Teacher Testimonials

Kellie, The Nature School

Participating in the Swarovski Foundation Water School project was an ideal fit for our Term 1 curriculum, offering our enthusiastic group of Year 7 students an opportunity to deeply explore the multifaceted world of water. The project modules not only served as a foundation for inquiry and discovery but also seamlessly integrated with our syllabus requirements, ensuring accessibility for all students and reinforcing their dedication to the topic. The process of designing and delivering the peer-teaching workshop honed our students' planning, organisational, collaboration, and communication skills. It also extended our network and fostered partnerships beyond the confines of our school, enriching our learning experiences with authenticity and real-world impact. By engaging with the Swarovski Foundation Water School project, we've not only expanded our knowledge but also contributed to a collective effort in understanding and addressing critical water-related issues. This experience has empowered our students to become informed, conscientious global citizens and has exemplified the power of education in creating lasting, positive change.

Nadine, Ajuga School

A very effective handsome educational experience outside of the classroom that enabled students to learn about the importance of water in a practical sense and hands on approach.

Kirsty, St Patrick's Catholic Primary School

Our Waterschool journey has provided our students who have a keen interest for investigation and research along with a love of the environment to be extended in their learning on a project that will benefit the community on a wider scale.

Melinda, Meadowbank Public School

My group of students really learned to value the environment and the importance of water. Peer teaching gave them confidence to teach others and many have now been elected as school leaders for next year.

Jaimi, Otford Public School

As a teacher at Otford Public School, the Swarovski Water School journey this year has been a transformative experience. The program's immersive curriculum has profoundly impacted our students, fostering a deep understanding of water conservation and its global significance.

Vanessa, Our Lady of the Assumption Catholic Primary School North Strathfield

This experience has been a very rewarding experience. It has been great to see the students engaging in learning and actually becoming passionate about caring for the water on our planet. It has been inspiring to see the students learning something new from each other and also from students from other schools. The students have learnt a lot and have loved being a part of the project and as a teacher, it has been great to see how far they have come in the year and how much they have learnt through this project.

Ryan, Holsworthy High School

An insightful experience where students could learn about their impact on their surrounding ecosystem and encourage others to work towards a solution.

Sarah, Llandilo Public School

Being involved int the Waterschool Project has allowed students at our school to become leaders of their own learning. Students spent time creating workshops and then presented these to fellow students and the community.

Celia, Tarawanna Public School

The resources have been fabulous and the support (first Hannah, then Loretta) excellent. The zoom expert scientists were excellent too It has been so beneficial participating in the program as participation validated the time we spent examining and exploring the adjacent creek and then breaking into focus areas of student choice. Due to participation in the program, students were then empowered to fulfil their designs and teach others about their learnings. We learnt about water as a precious system and resource. We tracked the local creek and observed and tested its water for life and water quality. Students designed habitat ponds; one using natural materials, and the other using a pre-fabricated mould, to potentially extend the creek habitat into our school. Animals visiting our school include bandicoots, water dragons, snakes and birds.

Leonie, Lugarno Public School

The Swarovski Waterschool Program stands as a remarkable worldwide initiative, captivating students with enjoyable experiments and demonstrations that highlight the significance of water and our responsibility to preserve and manage this limited resource. Through active participation in the program, students have the opportunity to cultivate collaboration, critical thinking, and creative skills, along with developing leadership qualities. The program's emphasis on student-led initiatives, where they harness their own ideas to create workshops promoting water conservation, serves as a truly inspiring aspect of their engagement. Our school has been part of this program for three years, culminating in the creation of a rain garden. Thank you, Swarovski Waterschool Program.

Rosemary, Regentville Public School (audience school only)

I was impressed in the effort the students put into their group projects.

Scott, Wollemi College (audience school only)

We are definitely interested in participating in your program next year!

Community Partnership Testimonials

Uncle Shayne, Aboriginal Elder

It was a pleasure being a part of the teaching team for Meadowbank PS. The subject of water sustainability is vital to the survival of all living things. Water is the world’s most important resource. Too often it is taken for granted because of its perceived abundance. However, global warming is threatening water resources worldwide. It is imperative to teach our future generations about this threat and moreover the imperative to preserve our water resources far more conscientiously.

The Swarovski Water Schools' programme is deeply meaningful. It is important for young learners to understanding how extremely valuable our water resources are. It is equally important, if not imperative, that they also learn about the importance of water preservation and sustainability. It was extremely pleasing to see how quickly the Meadowbank PS students were able to engage with the subject of water conservation and reiterate the importance of its preservation back to us throughout the course of the day. I strongly believe this programme is having, and will continue to have, a significantly positive influence on our young people.

Traditional Aboriginal knowledge has enabled Aboriginal people to thrive on the Australian Continent for thousands of generations. Our traditional knowledge of water and how to sustain it should always be a major aspect of these types of programmes. I believe it is extremely important for young learners have access to such knowledge so they can gain a deeper understanding of Aboriginal people's cultural relationships with water in the early stages of their learning.

I felt extremely privileged to be a part of the teaching staff. The subject of water gave me the ideal opportunity to share with students the deeper cultural relationships Aboriginal people have with water.

Esther, Swarovski Australia

Effective program that not only gives opportunity for students to engage with other external peers, however able to come together for a common effort to learn about water conservation and bring about change within their community.

Kristina, Swarovski Australia

Working with kids was absolutely amazing. It was great to see them inspired to change the world and bring a better future to this planet. I'd love to participate in more events like this. Great Initiative. Kids are the future!

Tegan, Swarovski Australia

The Swarovski Waterschool Flagship event in partnership with Earthwatch was a wonderful opportunity to get involved and support a cause that is part of our brands DNA. Not only did I walk away with key learnings around water conservation, but it was evident that all the participating schools took immense value from each and every workshop. The sheer passion and effort that was poured into the day by both students and teachers alike was so lovely to see, and it just served to demonstrate that there is still so much potential to make a difference through this program. I feel so fortunate to have been able to play a small part in such an important day.

This concludes the Swarovski Waterschool Australia Annual Report for 2023.

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SWAROVSKI WATERSCHOOL

The 2023 Swarovski Waterschool Australia Annual Report has been prepared by Earthwatch Australia Education Program Manager, Loretta Leary with final edits by Earthwatch Head of Education, Michelle Tripp. Acquittal prepared by Earthwatch Head of Business Operations, Alison Rafferty and Earthwatch Chief Executive Officer, Fiona Sutton-Wilson. Earthwatch social posts created and media reach information collated by Earthwatch Australia Digital Marketing Coordinator, Monisha Alexander.