



CLEAN4SHORE

“Communities Protecting Local Waterways”

ANNUAL REPORT 2020



Local Land Services



This Project received Grant funding from the Australian Government through the Improving Your Local Parks and Environment program.



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Acknowledgements

The Federal Government Improving Your Local Parks and Environment Grant (IYLP&E) secured by Clean4shore in 2017 concluded in June 2020 with immediate efforts commenced by local Member for Robertson, Lucy Wicks, in conjunction with Central Coast Council to source a long term grant to ensure the future operations of the Clean4shore program. Federal Minister for the Environment, Susan Ley, visited Terrigal High School students as they unloaded rubbish from their Clean4shore field trip, announcing a three-year grant from the Environment Restoration Fund. This grant has enabled Clean4shore to continue to engage local schools, youth, community, disability and indigenous groups in the quest to rid our waterways of plastic and similar rubbish. Central Coast Council once again manages the grant with both Lucy Wicks and Councils Senior Estuary Manager, Warren Brown, closely monitoring and supporting the program.

Federal Government Members of Parliament Julian Leeser, Emma McBride and Lucy Wicks supported smaller successful grants from the Community Environment Program. These \$15K grants enabled clean-up activities by our volunteer groups outside of the grant boundaries covered by the Environment Restoration Grant. The grants also targeted invasive weed eradication under the guidance of local bushcare groups and governing stakeholders.

State Members of Parliament Adam Crouch, Robin Preston and Lucy Wicks secured grants for plant and equipment under the Community Building Partnership and Stronger Communities Program, which enabled the replacement of the Clean4shore barge motor and the purchase of a larger trailer, now required for the heavier loads our volunteers are collecting.

Hunter Local Land Services recognised the urgency for action on the alarming volumes of litter within the Hunter Wetlands. They secured grant funding through the National Landcare Program for fifteen field trips during 2020. Local Land Services Volunteers and community members removed a staggering twenty tonnes of litter and general rubbish from the Hunter River mangroves close to the Hexham Bridge. Many thanks to those community groups who attended these demanding field trips and the outstanding support from Hunter Local Land Services volunteer coordinator Alissa Rogers and her team. Port Stephens Council supported this program receiving all litter, free of charge. Ash Island bushcare group, “Friends of the Schoolmasters House”, also contributed to the Hunter Wetlands project through Newcastle Rotary.

State Member for Port Stephens and Shadow Environment Minister, Kate Washington, attended a Hunter River field trip to view and assess support options for the vast extent of the rubbish in these crucial wetlands. Extensive media coverage was received, highlighting the urgency for action. Thanks to the NBN Television and the Newcastle Herald for visiting our work environment.

The Environment Protection Authority supports Clean4shore’s application for “Charity Status” at Woy Woy, Buttonderry and Newline Waste Management Facilities. Central Coast Council and Port Stephens Council supports Clean4shore application, reducing our disposal fees. Staff at both facilities supply Clean4shore with courteous and professional direction through the disposal process.

Clean4shore recognises the role of our subcontracted barge operators. Simon Funnel (Brisbane Waters, Tuggerah, Lower Lake Macquarie & Hunter) plus Rob Moxham’s Hawkesbury River team (Mitchell, Lee, Jack and Brett) and Banks Marine (Baden Hunter River) who provide valuable mentoring, local and maritime education, coupled with the vital role of removal, storage and unloading of the 64 tonnes of rubbish collected during 2020. Their guidance and recognition of risk management procedures are essential to Clean4shore’s operations, as is their positive interaction with all the attending groups.

Clean4shore acknowledges the Department of Education for providing the vision and approvals to allow student participation during a highly disruptive 2020. COVID19 presented many challenges for student groups with Clean4shore’s risk assessment and COVID19 plan implemented following DET guidelines. Clean4shore can successfully adapt to students from support, behaviour management, environment, geography, mainstream and work experience groups. The supervision provided by the attending staff was at all times proactive, educational and enjoyable in often an uncomfortable environment.

Social media communication of field trips via Facebook and Instagram attracts a huge following, with valuable feedback received through this medium. Thanks to Shelly and Sammy for the ongoing management of this medium. Media promotion from Clean4Shore, includes newspaper editorials, television and regular ABC interviews with Scott Levi and Malcolm Poole.

Following the severe storms in February, extensive damage was incurred on the program coordinators dwelling, requiring removal of Clean4shore equipment whilst repairs were completed. JD’s Family Auto continued their program support using a container to store all equipment, plus storage for the barge and trailer. Many thanks to James and his team.

Take3 from the Sea assisted Clean4shore with delivering educational components of litter reduction within the school and community environment. COVID19 restriction significantly restricted both Clean4shore and Take3’s ability to attend school buildings. Take3 successfully engaged with Clean4shore on joint field trips promoting the common aim of both organisations in removing local litter from the waterways.

Clean4shore must also acknowledge our small administration team of Jan Sillato, Sallie-Ann Macklin and Helen Hayden for the in-kind contribution of managing the Clean4shore program. However, the biggest “thank you” must go to all of the students and volunteers that enable this unique program to be successful.



Adam Crouch State Member Parliament
Terrigal



Baden Banks Marine

Financial Support 2020

Australian Federal Government
 Central Coast Council
 Hunter Local Land Services
 Landcare Australia
 NSW State Government
 Environment Protection Authority
 Hornsby Council
 Newcastle Rotary Club

Logistical Support

Graham Johnston (program coordination)
 Simon Funnell (barge operations)
 Clean4Shore Admin: Sallie-Ann Macklin
 Helen Hayden, Jan Sillato, Samantha Boesan
 Rob Moxham, Banks Marine (barge subcontractors)
 JD's Family Auto, mechanical and equipment storage
 Tangaroa Blue (statistics/data)
 Brisbane Waters National Park
 Aqua-muse Avoca Beach
 Local & ABC Radio
 NSW Maritime & Fisheries
 Floating Landcare Central Coast
 Take 3 from the Sea
 Ash Island Landcare
 Sea Shelters Port Stephens
 Boomerang Alliance
 Rumbalarah Nature Reserve
 Terrigal Marine Discovery Centre
 Oceanwatch Australia
 Brisbane Waters & Hawkesbury Oyster Growers
 Bar Point Community
 Seacoast Seafoods
 Central Coast Moorings
 Friends of the Schoolmasters House, Ash Island

Volunteer Contribution

Brisbane Waters Secondary College
 Terrigal High School
 Kincumber High School
 St Edwards
 Christian Brothers College
 Erina High School
 Narara Valley High School
 Green Point Community College
 Central Coast Grammar College
 Gosford High School
 Wadalba College
 Hunter LLS Community Volunteers
 St Peters Catholic College
 Tuggerah Lakes The Entrance Campus
 Chris O'Riley's Youth off the street
 Maitland Christian College
 Cherrybrook Technology High
 Loretto Girls College
 Asquith Boys High
 Asquith Girls High
 The Glen
 Aboriginal Men's Health Clinic
 Department of Justice Frank Baxter
 MacMasters Beach Surf Club
 Gosford Venturer Guides
 Ourimbah Venturer Guides
 Bouddi Bushcare
 Wamberal & Terrigal Communities
 Wamberal Surf Life Saving Club
 Newcastle Outdoor Mountaineering
 Department of Juvenile Justice



Alissa Rogers Hunter Local Land Services
Volunteer coordinator



Kate Washington State
of Parliament Port Stephens



Warren Brown



Rob Moxham/ Mitchell on the
Hawkesbury



Brisbane Waters National Parks



Boomerang Alliance/ Take 3 from the Sea



Bouddi Bushcare / Floating landcare



Simon

Executive Summary

Secured grant funding which enabled an immediate start to our 2020 program. The Federal Government Grant; Improving Your Local Parks and Environment (IYLP&E) entered the final six months of funding, plus the announcement from Federal Minister for the Environment, Susan Ley of an additional four-year grant through the Environment Restoration Fund had Clean4Shore in a very secure financial position. Promotion and planning for 2020 commenced with high expectations of a hectic and productive year.

The States bushfire crisis limited our early field trips, especially in the upper Hawkesbury River system, under the expanding Mt Gosper fire threat. From drought to bushfires to flooding rain in February. The Clean4shore team assessed the flood debris as thousands of fire-affected tree logs were swept down the Hawkesbury River onto the Central Coast beaches and up into Brisbane Waters. Adult volunteers including "The Glen", Macmasters Beach Surf Club, Juvenile Justice and the Hawkesbury River and Brisbane Water Oyster Growers commenced the initial flood clean up. School groups commenced in March, removing bulk smaller items from all waterways and eagerly booked for further involvement in the program.

The arrival of COVID19 required significant adjustments to the program. All schools and community groups cancelled with the small Clean4shore team to continue the flood debris removal without volunteer attendance and under our strict approved COVID19 guidelines. Flood debris, concrete pontoons, derelict vessels and further surveying maintained the program's momentum.

The Hunter River was surveyed during May, revealing excessive amounts of small and larger items in the mangroves and foreshores close to Ash Island. In June, the field trip had the Clean4shore barge returning with seventy-five large bags of rubbish plus bulk items weighing 1.09 tonne. More concerning was the staggering volume of rubbish uncovered on the Northern foreshore of the Hunter River close to the Hexham Bridge. Clean4shore described this as "Australia's Worst Litter Deposits". The publicity generated by Clean4Shore had an alarming response and was not intended to reflect previous efforts by volunteers in the Hunter Wetlands negatively. More importantly, the publicity was to alert stakeholders of the litter issue that was to be confronted. The issue of significant litter in the Hunter Wetlands remains and will be a key focus point for Clean4Shore in 2021.

Hunter Local Land Services secured grant funding to engage the Clean4shore team and local community volunteers to commence the clean-up task from June in the Tomago mangroves. State member of Parliament and Shadow Minister for the Environment, Kate Washington visited the site, overwhelmed at the volume of rubbish, mostly unseen from the foreshore. The following fifteen field trips removed a staggering 19.93 tonne from approximately five kilometres of mangroves.

Grants secured under the Community Environment Program introduced invasive weed removal into the Clean4shore program. COVID19 restrictions reduced the ability of the intended school groups to expand into this program, strongly supported by Central Coast Council. Bouddi Bushcare, a local group and 2019 NSW Landcare Award Finalist, continued their regeneration tasks on Pelican & Riley's Island with Clean4shore funding, allowing Simon to utilise the barge for transportation purposes. Kincumber High school commenced invasive weed removal on the small islands close to South Kincumber Channel. The invasive weed removal task combined with litter has strong educational merit and will be further promoted, engaging students, stakeholders, and community bushcare volunteers.

The Community Environment Program assisted with field trip activities outside of the Central Coast boundaries covered in our major grants. High schools from the Federal Electorates of Dobell (Emma McBride) and Berowra (Julian Leeser) completed field trips, with praise generated by the community social media outlets, especially in the Gwandalan and Summerland Point region.

Final reports were submitted by Warren Brown from Central Coast Council upon the conclusion of the IYLP&E grant in May. The first instalment of the Environment Restoration Grant received at the end of June to financially stabilise the Clean4shore program through to 2024.

Clean4Shore activities in the Coastal Lagoons generated local community interest with Terrigal Marine Discovery, Boomerang Alliance, Wamberal Surf Life Saving Club and Take3 from the Sea assisting with the litter removal from these waterways. Canoes and kayaks were utilised by the volunteers, with flood debris noticeably present on Wamberal Lagoons as outdoor furniture and staircases were washed into the lagoon from the earlier East Coast storms.

Excluding the Hunter River, statistics suggested a huge reduction in the volume of small litter items collected during 2020. The occurrence of "barcoded" bottles and can, either glass, metal or plastic have greatly disappeared due to the State Governments "Return and Earn" scheme. The reduction of single-use grocery bags from our major grocery outlets has also declined. Initiatives including the reduction of plastic single-use plastic, including straws, will contribute to the future reduction of small items collected. These are all positives outcomes for the environment.

The floods earlier in the year dislodged or damaged many of the larger items identified as issues of concern during the previous year. Concrete covered polystyrene pontoons are still found in the Hawkesbury River mostly cracked, decaying and leaking polystyrene pieces into this waterway. Oyster product is still appearing in Brisbane Waters and the Hawkesbury, with local oyster growers combining successfully with stakeholder Oceanwatch to address this issue through the "Tide to Tip" program. Derelict old vessels still rot, sink or become dislodged from their moorings with Clean4shore removing thirty-five vessels. Clean4shore removed marine and jetty infrastructure from the mangroves of the Hawkesbury River and Brisbane Waters through the Environment Restoration Grant.

School engagement partially re-commenced in term three, more prominently in term four as all waterways received proactive attendance from the school students. Maitland Christian College attended the Hunter River, being the first school on that waterway. Student participation allows for further education on marine and litter issues, together with promoting team building, self-confidence and self-esteem through active participation in an often challenging environment.

Overall the 2020 program endured environmental challenges with extreme weather conditions, limited community presence through the COVID19 restrictions and physical challenges endured by the hard-working team on the Hunter River. This is all part of the Clean4Shore experience both past, present and in the future.

Background

Clean4Shore is a small not for profit community based organization located at MacMasters Beach on the Central Coast of NSW. The program utilises schools, youth, disability, community and corporate groups to clean litter and general rubbish along the foreshores of the Hawkesbury River, Brisbane Waters, Tuggerah Lakes System and more recently Lower Lake Macquarie and the Hunter River.

The clean-ups commenced during a MacMasters Beach Surf Club Duke of Edinburgh's Award kayaking expedition of the Hawkesbury River in 2010. Large volumes of litter were collected on this trip with the Surf Club returning as a social activity for members to address the litter issue. This program quickly expanded to engage school and community organisations, moving into the adjoining waterways of Brisbane Waters and Tuggerah Lakes.

The program utilised surf rescue vessels (IRB's) from the MacMasters Beach Club to transport volunteers and collected rubbish. Great fun and excitement for the young volunteers but hardly the craft for litter collection especially oyster product! Large oyster barges replaced the IRB's in 2014 allowing greater volumes of litter to be collected and improved risk management procedures and guidelines.

The program is reliant on grant funding to engage our community groups, employ subcontracting vessels and transport and dispose of all collected litter. The Federal and State Government joined major stakeholders Greater Sydney and Hunter Local Land Services, Hornsby Shire and Central Coast Councils to provide and secure these grants, keeping the volunteers and subcontractors on the water.

The removal of litter particularly plastics and polystyrene from waterways improves the visual appearance of the estuaries but more importantly greatly improves the estuarine and the marine environment. The volunteers receive an educational challenge and adventure whilst contributing to the global issue of litter in our waterways.

Early days MacMasters Beach Surf Club
at Maitland bay 2013



IRB's and Oysters Brisbane Water 2013



Clean4shore Project Summary 2020

| Field trip Location | Field Trips Completed | Collected Items | Weight Tonne | Volunteer Numbers | Volunteer Hours |
|---------------------------------------|-----------------------|-----------------|---------------|-------------------|-----------------|
| Hawkesbury River | 28 | 14,359 | 17.058 | 153 | 643 |
| Brisbane Waters | 48 | 50,785 | 24.330 | 274 | 985 |
| Tuggerah Lakes / Lower Lake Macquarie | 11 | 13,644 | 3.350 | 72 | 227 |
| Hunter River | 17 | 204,790 | 19.930 | 199 | 736 |
| Total | 104 | 282,964 | 64.668 | 698 | 2,581 |

Comparison from Project Summary 2019

| Field trip Location | Field Trips | Collected items | Total Weight | Volunteer Numbers | Volunteer Hours |
|---------------------------|-------------|-----------------------------------|---------------|-------------------|-----------------|
| Hawkesbury River | 35 | 15,809 | 30.420 | 250 | 810 |
| Brisbane Waters | 51 | 90,418 | 27.036 | 280 | 850 |
| Lower Lake Macquarie | 6 | Stats included in Brisbane Waters | | 32 | 94 |
| Tuggerah Lakes | 11 | | | 43 | 189 |
| Coastal Lagoons | 5 | | | 56 | 203 |
| Hunter River / Ash Island | 3 | 5,080 | 1.580 | 10 | 27 |
| Port Stephens | 3 | | | 37 | 60 |
| Lane Cove River | 2 | | | 2 | 6 |
| Totals | 116 | 111,307 | 59.600 | 710 | 2,239 |

Comparison from Project Summary 2018

| Field trip Location | Field Trips | Collected items | Total Weight | Volunteer Numbers | Volunteer Hours |
|---------------------|-------------|-----------------|---------------|-------------------|-----------------|
| Hawkesbury River | 31 | 26,292 | 33.900 | 180 | 617 |
| Brisbane Waters | 77 | 107,336 | 27.900 | 414 | 1460 |
| Tuggerah Lakes | 6 | 3,658 | .800 | 6 | 24 |
| Total | 114 | 137,286 | 62.600 | 600 | 2,101 |

Clean4shore Total Summary from 2014 - 2020

| Clean4shore Statistical Year | Field Trips | Collected items | Total Weight Tonne | Volunteer Numbers | Volunteer Hours |
|------------------------------|-------------|------------------|--------------------|-------------------|-----------------|
| 2014 | 81 | 131,631 | 71.4 | 691 | 2,847 |
| 2015 | 39 | 193,243 | 34.9 | 465 | 1,774 |
| 2016 | 67 | 182,636 | 52.2 | 554 | 2,160 |
| 2017 | 76 | 106,636 | 56.9 | 434 | 1,603 |
| 2018 | 114 | 137,286 | 62.6 | 600 | 2,101 |
| 2019 | 116 | 111,307 | 59.6 | 710 | 2,239 |
| 2020 | 104 | 282,964 | 64.6 | 698 | 2,581 |
| Total | 597 | 1,145,703 | 401.6 | 4,142 | 15,305 |

Case Study Hunter River Mangroves (Tomago and Hexham Bridge)

The vast extent of litter and general rubbish, filtered and withheld in the Hunter River coastal mangroves was exposed, following a chance visit by Clean4shore to the Tomago mangroves at “Old Punt Road” and under the Hexham Freeway Bridge. Previous case studies of Narara Creek and Tascott Straight on the Central Coast contained similar heavy litter deposits as reported in previous Annual Reports. The volume consistently spread over five kilometres of mangroves on the Northern foreshore was indeed concerning.

Fourteen volunteer based field trips removed 19.930 tonne of rubbish averaging 1.42 tonne per trip with 1,614 full large bags of rubbish removed, averaging 115 bags per trip. 949 larger items were collected included 315 large plastic drums or buckets, 219 car or truck tyres, 139 larger polystyrene blocks or boxes, 36 mattresses, 26 larger pieces of boat decking and marine ply and 24 pieces of whitegoods. The larger than normal numbers of glass bottles 22,939 is consistent with this products inability to “breakdown”.

Plastic bottles and polystyrene pieces were more concerning as the numbers collected indicated that many were reduced into micro plastic or dissolved into the mangroves and waterways. The data on the soft plastics indicates that many more are still present, as higher tides covered these items during field trips. More noticeably and on a positive outcome for the environment was the absence of “bar coded” glass bottles, cans, hard plastics and plastic bottles. Statistics and comments from the volunteers suggested that only 1% of collected items were recent litter deposits containing bar codes.

The Hunter Wetlands cover a vast area, from Heatherbrae to the Stockton Bridge with the Hunter River separating into the North and South Channel including the larger Ash Island and many smaller tidal mangroves covered Islands. Mangroves adjoining the major roads have extensive litter from illegal dumping (Ferry Street) or tidal deposits of storm and flood debris. The vast majority of this litter is out of sight and requiring attention from the governing stakeholders. Clean4shore’s early estimates of 100 tonnes of litter and rubbish within the Hunter Wetlands, could be vastly underestimated.

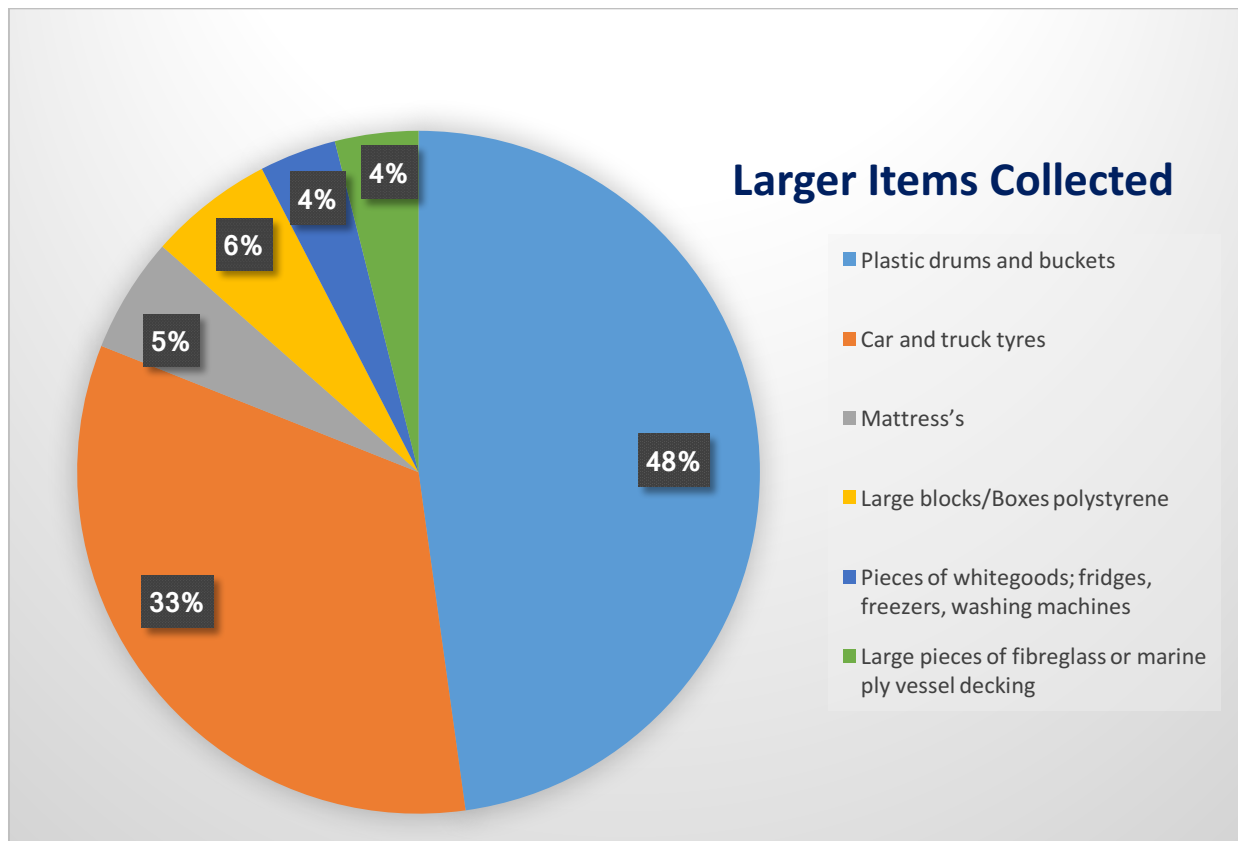
Massive effort by the community and school students who commenced the litter removal program under the guidance and support from Hunter Local Land Services with disposal support from the Port Stephens Council.

Vessel floatation foam – Tomago Mangroves



Overview: Hunter River

| Date | Volunteers Numbers | Bags of Litter | Weight Collected | Plastic Bottles | Glass Bottles | Polystyrene Pieces | Soft Plastics | Hard Plastics |
|-----------------|--------------------|----------------|------------------|-----------------|---------------|--------------------|---------------|---------------|
| 13/6/20 | 15 | 75 | 950 | 1275 | 950 | 1780 | 638 | 435 |
| 4/7/20 | 18 | 135 | 1.4 | 3240 | 637 | 1146 | 428 | 443 |
| 22/7/20 | 21 | 141 | 1.92 | 2479 | 3025 | 3788 | 112 | 2467 |
| 25/7/20 | 16 | 85 | 0.9 | 1710 | 1417 | 1870 | 241 | 724 |
| 13/8/20 | 18 | 131 | 2.08 | 3780 | 3049 | 1320 | 865 | 675 |
| 5/9/20 | 26 | 143 | 1.68 | 3217 | 1966 | 4647 | 1787 | 553 |
| 10/9/20 | 8 | 126 | 1.28 | 1197 | 1632 | 409 | 1575 | 283 |
| 24/9/20 | 10 | 121 | 1.48 | 2813 | 1270 | 3357 | 1028 | 272 |
| 15/10/20 | 18 | 113 | 1.9 | 2508 | 525 | 2542 | 1073 | 226 |
| 19/10/20 | 9 | 109 | 0.94 | 1889 | 2289 | 1526 | 327 | 254 |
| 29/10/20 | 13 | 84 | 1.6 | 756 | 1008 | 355 | 294 | 1134 |
| 12/11/20 | 12 | 131 | 1.42 | 3144 | 1539 | 1965 | 1506 | 2128 |
| 24/11/20 | 16 | 110 | 1.32 | 2,640 | 1870 | 1375 | 550 | 1210 |
| 7/12/20 | 21 | 110 | 1.2 | 1815 | 1760 | 715 | 1375 | 1100 |
| 14 Trips | 221 | 1,614 | 19.93 | 32,463 | 22,937 | 26,759 | 11,799 | 11,904 |

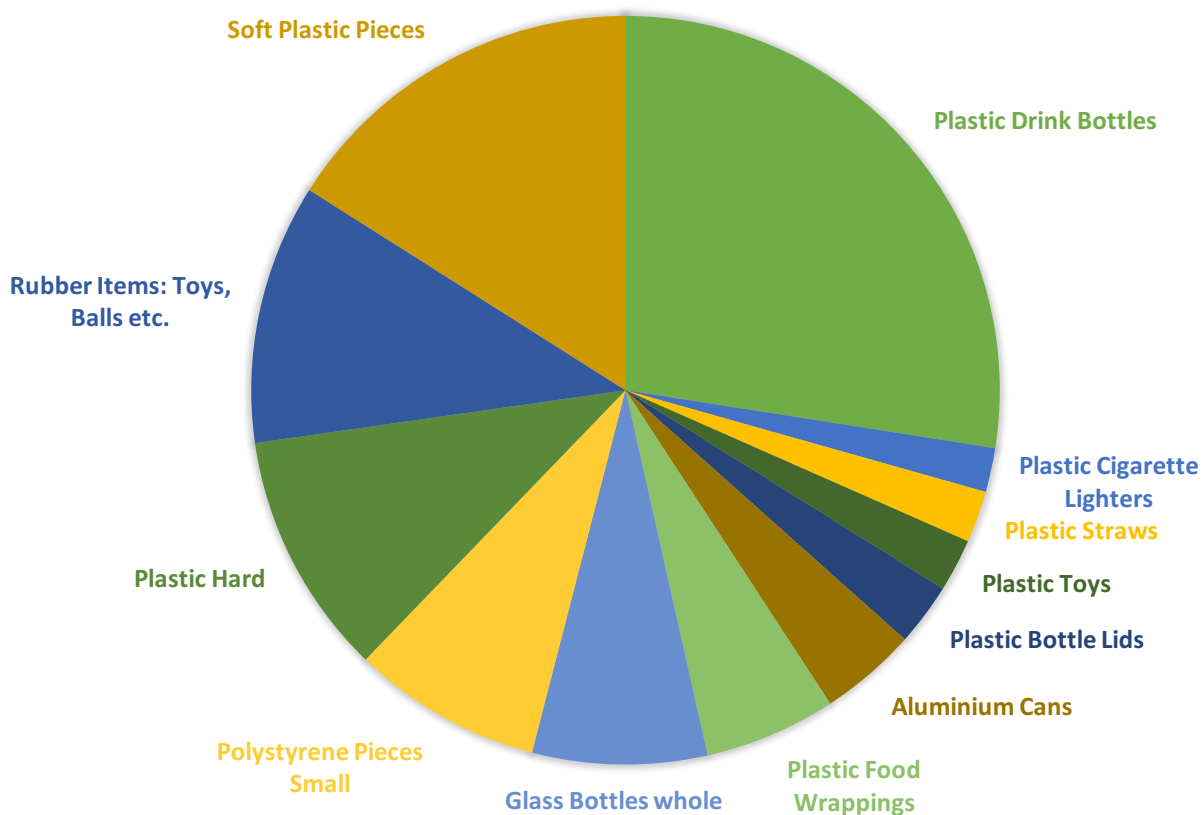


Statistics

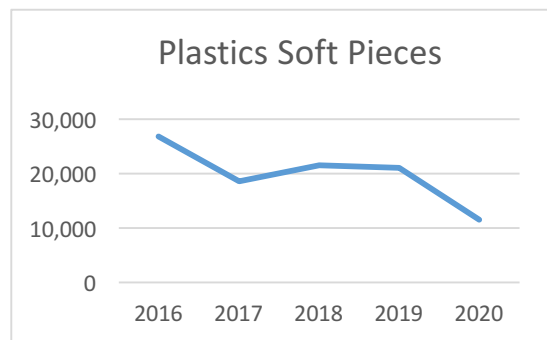
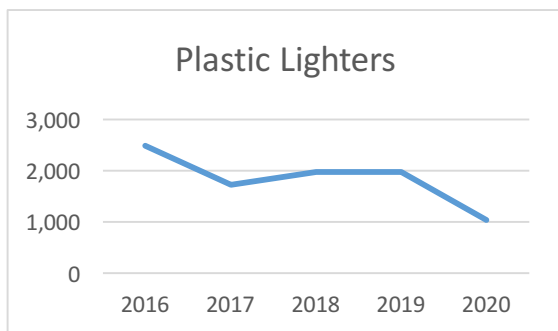
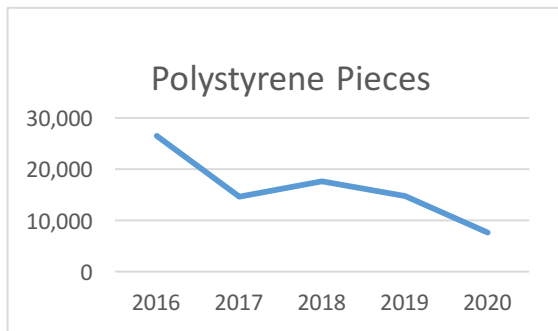
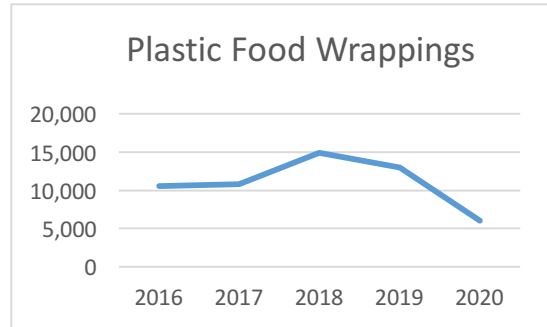
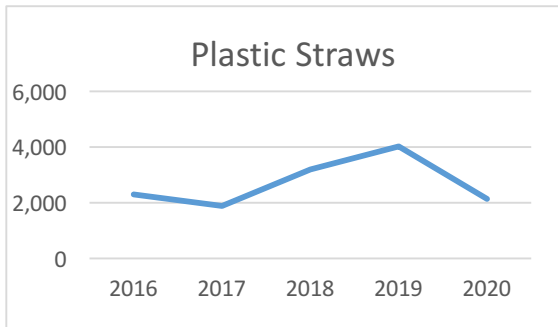
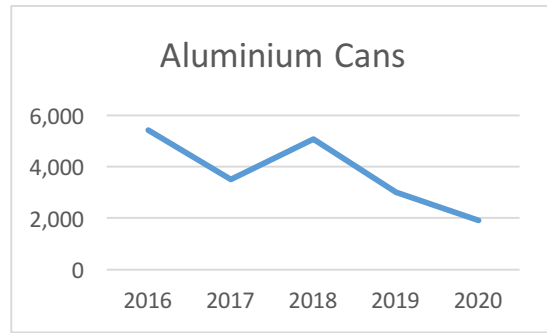
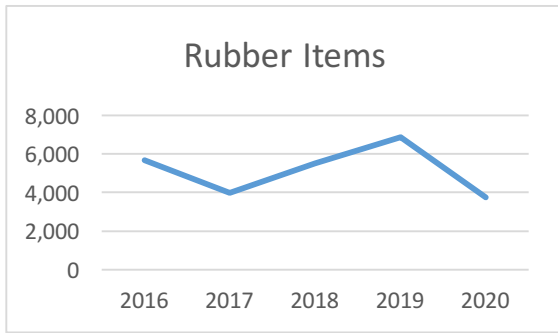
Clean4Shore statistics are generated at the end of each field trip from average sampled bags. All larger items are carefully documented. The weight of collected litter is justified from individual weighbridge receipts generated from Woy Woy and Newline Landfill Facilities. Statistics are forwarded to Tangaroa Blue and the Australia Marine Data Institute and included in each field report. A full summary of litter statistics is included at the end of this report document.

Below is a summary of the “Top Twelve” for 2020.

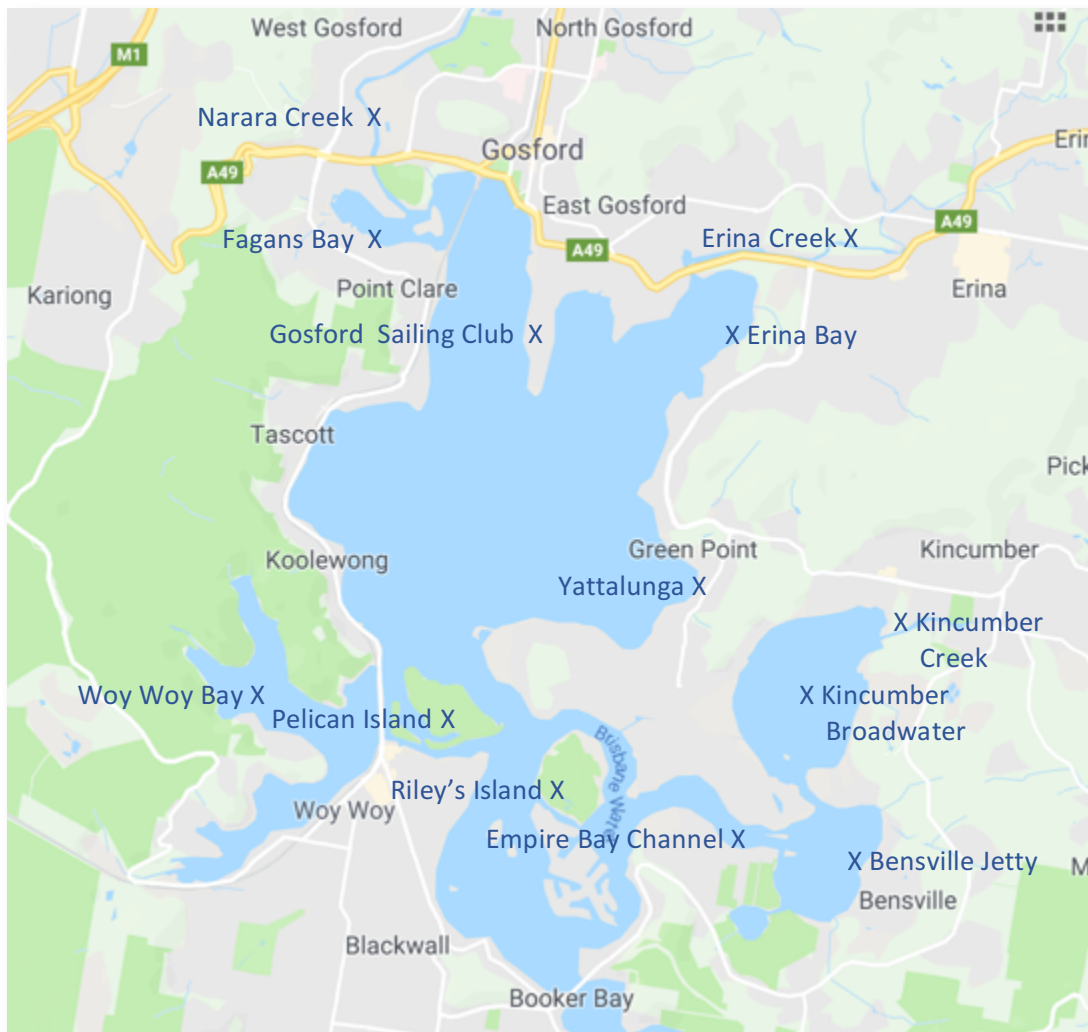
| 2020 Top Twelve Items Collected | | | | | |
|---------------------------------|---------------|---------------------|---------------|--------------------------------|----------------|
| Plastic Drink Bottles | 43,389 | Soft Plastic Pieces | 25,289 | Plastic Food Wrappings | 8,986 |
| Plastic Hard | 16,621 | Plastic Bottle Lids | 4,268 | Plastic Straws | 3,521 |
| Plastic Cigarette Lighters | 3,005 | Plastic Toys | 3,602 | Rubber Items: Toys, Balls etc. | 17,754 |
| Polystyrene Pieces Small | 12,939 | Glass Bottles whole | 11,918 | Aluminium Cans | 6,621 |
| Totals | 75,954 | | 45,077 | | 36,882 |
| Grand Total | | | | | 157,913 |



Analysis and trends of smaller items over five years - excluding Hunter River.



Brisbane Waters Summary



Surveys commenced early in January as sites and planning for a busy year ahead began in earnest for our schools and community groups. Assistance was provided to the local oyster growers to remove old infrastructure with generous in-kind support directed back to Clean4shore from this group and Peak body "Oceanwatch". The bush regeneration program was promoted and commenced with Bouddi Bushcare on Riley's island and Kincumber High School removing invasive weeds from the small Island off South Kincumber Channel under the guidance of Central Coast Council and Brisbane Waters National Park. Funding for this program was included in the Community Environment Program Grants supported by local Federal Members of Parliament.

The major flooding in February had little effect on the small feeder creeks that flow in Brisbane Waters. Storm debris washed into the roadside drains empties into Fagan's Bay, Kincumber Broadwater, Erina and Woy Woy Bay and Narara Creek and is quickly addressed by our school and community groups. COVID19 restrictions put an immediate halt to schools and community participation with Clean4shore quickly addressing and issuing a COVID19 plan acceptable to the Department of Education plus adjusting risk management practices.

Clean4Shore and our subcontractors (Simon) continued the program, concentrating on flood debris material, mainly large logs that washed from the Hawkesbury River into Brisbane Waters. Clean4Shore addressed boating hazards identified by Maritime from the floods by removing larger logs entangled in jetties and on isolated foreshores, where Central Coast Council plant and staff's entry was limited.

We briefly introduced program participation during the third term of school with Erina and Narara Valley High joining the Venturer Guides on the clean-up task. A second level of restrictions reduced the program. However, school term four bookings quickly increased, and once again, Clean4shore was on the water. The Federal Government Environment Restoration Grant commenced with the Stronger Communities Grants, allowing for full participation by the bright green barge and volunteer participants. The 2020 year finished strongly on the Central Coast in Brisbane waters.



Gosford Guides on the Stats



All alone Kincumber High



Flood debris response Brisbane Waters



Flood debris response Brisbane Waters



Crab Traps illegal in Brisbane Waters (Erina High)



BWSC Umina Campus

Brisbane Waters 2020

| Date | Group | Site | Weight Tonne | Volunteers | Total hours |
|----------|---------------------------|-------------------------|--------------|------------|-------------|
| 07/01/20 | Clean4shore Survey | Narara Creek | .60 | N/A | N/A |
| 08/01/20 | Macmasters SLSC | Empire Bay | 120 | 5 | 17 |
| 14/01/20 | Clean4shore | Dell Road Narara | 1.280 | 4 | 4 |
| 18/02/20 | Coast Oyster Growers | Gosford Broadwater | 280 | 8 | 32 |
| 20/02/20 | St Edwards College | Erina Bay | 480 | 12 | 48 |
| 26/02/20 | Bouddi Bushcare | Riley's Island | .200 | 4 | 12 |
| 28/02/20 | BWSC The Croft | Putty & Littles Beach | 180 | 4 | 16 |
| 01/03/20 | Gosford Venturer Guides | Fagan's Bay | 180 | 8 | 32 |
| 11/03/20 | Terrigal High School | Fagan's Bay / Narara | 340 | 11 | 50 |
| 13/03/20 | Kincumber High School | Kincumber Broadwater | 340 | 15 | 70 |
| 20/03/20 | Clean4shore | Cockle Bay | 780 | N/A | N/A |
| 23/03/20 | Clean4shore | St Huberts Vessel | 540 | N/A | N/A |
| 14/04/20 | Clean4shore | Empire Bay Boats | 400 | N/A | N/A |
| 17/04/20 | Clean4shore | Booker Bay Vessel | 380 | N/A | N/A |
| 20/04/20 | Clean4shore | Empire Bay Vessel | 960 | N/A | N/A |
| 21/04/20 | Clean4shore | Merritt's Wharf Vessel | 2.500 | N/A | N/A |
| 22/04/20 | Clean4shore | Riley's Island Vessel | 1.160 | N/A | N/A |
| 13/05/20 | Clean4shore Survey | Narara Creek | 180 | N/A | N/A |
| 18/05/20 | Coast Oyster Growers | Narara Creek | 1.120 | 6 | 18 |
| 25/05/20 | Clean4shore | Merritt's Wharf | 2.220 | N/A | N/A |
| 27/05/20 | Central Coast Moorings | Orange Grove | 600 | N/A | N/A |
| 20/07/20 | Gosford Venturer Guides | Narara Creek | 180 | 9 | 23 |
| 04/08/20 | Erina High School | Erina Creek/Bay | 200 | 9 | 28 |
| 05/08/20 | Erina High School | Yattalunga | 240 | 9 | 36 |
| 12/08/20 | Bouddi Bushcare | Riley's Island | 160 | 10 | 30 |
| 01/09/20 | Narara Valley High | Narara Creek | 640 | 12 | 48 |
| 02/09/20 | Bouddi Bushcare | Pelican Island | 180 | 12 | 36 |
| 17/09/20 | Clean4shore Survey | Erina/Terrigal/Wamberal | 0 | N/A | N/A |
| 29/09/20 | Terrigal Marine Discovery | Terrigal Lake | 240 | 5 | 15 |
| 30/09/20 | Wamberal Community | Wamberal Lake | 350 | 8 | 24 |
| 02/10/20 | Boomerang/Rumbalarah | Erina Creek | 200 | 5 | 15 |
| 09/10/20 | Marine Discovery/Take 3 | Terrigal Lagoon | 520 | 6 | 18 |
| 12/10/20 | C4S Community | Hardy Bay | 460 | N/A | N/A |
| 13/10/20 | Clean4shore | Terrigal lagoon | 220 | N/A | N/A |
| 30/10/20 | BWSC Umina Campus | Woy Woy Bay | 320 | 9 | 36 |
| 04/11/20 | Killcare Marine | Marina Peers Recycled | N/A | N/A | N/A |
| 13/11/20 | NSW Maritime | Empire Bay Vessels | 1.000 | N/A | N/A |

| | | | | | |
|-----------------------|-------------------------|--------------------|---------------|------------|------------|
| 18/11/20 | Clean4shore | Empire Bay Vessels | 1.580 | N/A | N/A |
| 25/11/20 | Narara Valley High | Fagan's Bay | 300 | 14 | 40 |
| 26/11/20 | St Edwards College | Erina Bay/Creek | 240 | 10 | 35 |
| 27/11/20 | BSWC Bushcraft | Riley's Bay | 580 | 9 | 27 |
| 30/11/20 | Gosford High School | Narara Creek | 340 | 23 | 69 |
| 04/12/20 | Green Point Christian | Kincumber Creek | 400 | 9 | 36 |
| 06/12/20 | Gosford Venturer Guides | Paddy's Channel | 160 | 8 | 20 |
| 08/12/20 | Central Coast Grammar | Avoca Lake | 240 | 24 | 100 |
| 11/12/20 | BWSC The Croft | Henderson Road | 400 | 6 | 18 |
| 14/12/20 | Clean4shore | Orange Grove | 280 | N/A | N/A |
| 18/12/20 | Clean4shore | Wamberal Lake | 600 | N/A | N/A |
| 48 Field Trips | | Totals | 24.330 | 274 | 985 |



Narara Valley High (tractor tyre, Fagan's Bay)



St Edwards Christian Brothers College



St Edwards Christian Brothers College



Lunch Green Point Christian College

Issues of concern

Derelict vessel, still re-appearing in Brisbane Waters and Illegal dumping in Erina Creek.

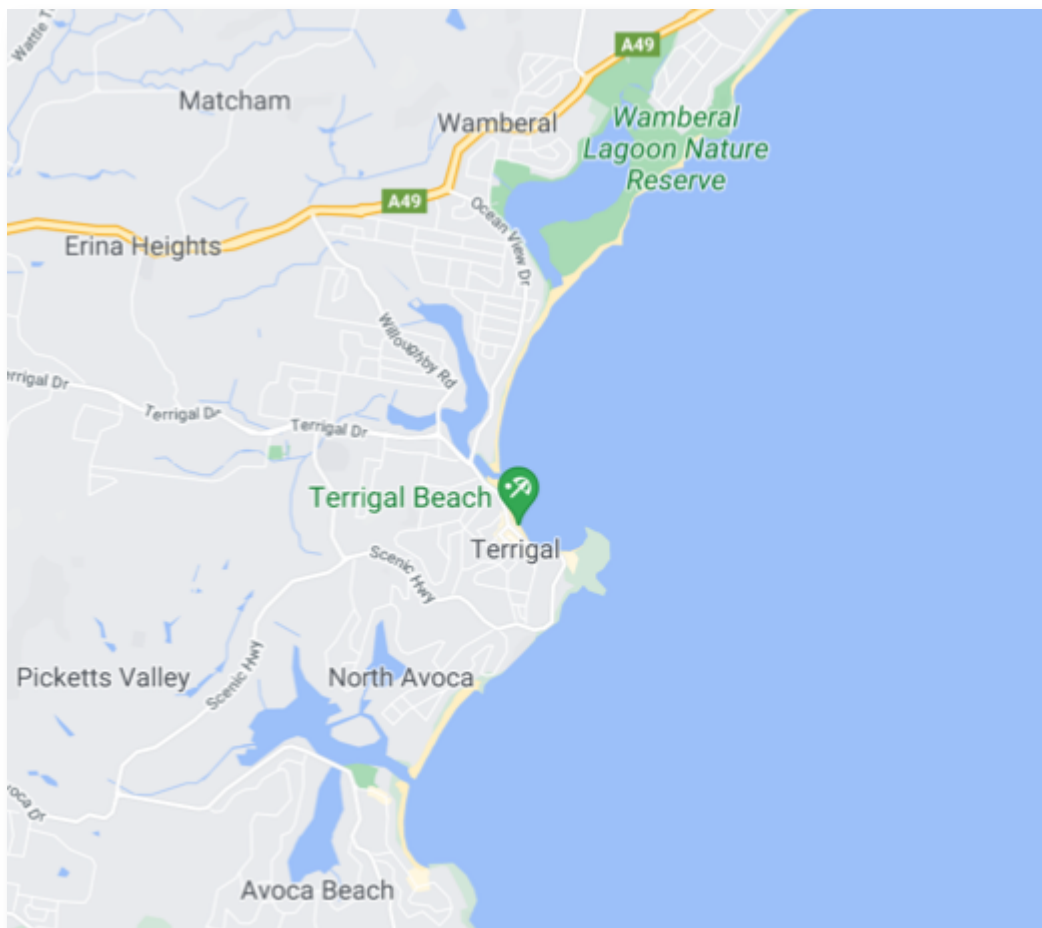


Coastal Lagoon Summary

Terrigal Marine Discovery promoted community land and canoe based litter removal from Terrigal and Wamberal Lagoons plus the outer mangroves in Erina Creek. Boomerang Alliance, Rumbalarah and Take3 from the Sea joined local residents on these tasks.

Wamberal Lagoon was most affected by the February storms, with major damage to the beach dune area and infrastructure to the adjoining waterfront homes. Treated pine decking and staircases were washed into the Lagoon by the tidal sea surge. Club and junior members of the Wamberal Surf Life Saving Club engaged in this program.

Central Coast Grammar College students and staff assisted with a foreshore clean-up of Avoca Lake in December. The large group of students paddled the foreshore collecting plenty of small and larger items. Many thanks to Aqua-muse, Avoca for kayaks utilised during this field trip and the proactive staff involved in the program, with community members.





Terrigal Lagoon - good find!



Terrigal Lagoon big load



Wamberal Nippers Wamberal Lagoon



Central Coast Grammar Avoca Lake

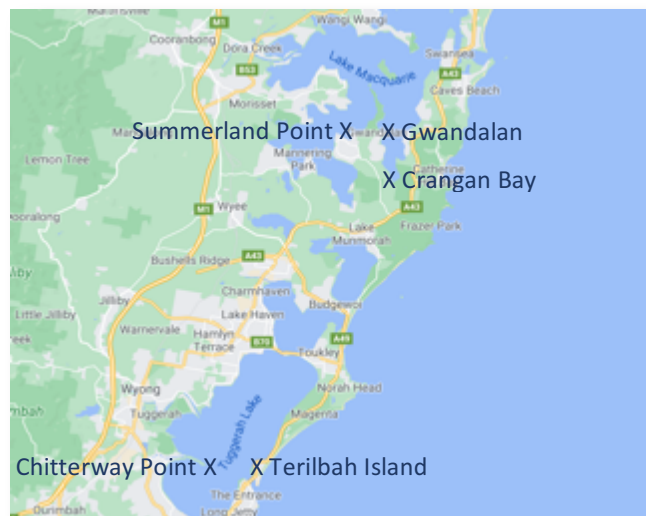


Flood debris (staircase) Wamberal lagoon



Hot Shot - Coastal lagoons

Tuggerah Lake and Lower Lake Macquarie Summary



Chris Riley's "Youth off the Streets" school continued their involvement with Clean4shore completing two field trips into the Crangan Bay and Gwandalan foreshores of lower Lake Macquarie early in 2020. Both trips were highly productive as "squatter style" camps and equipment were removed from Crangan Bay.

Car tyres dumped into the shallow waters were eagerly removed by the students, fully appreciating a morning of adventure, challenges and team building. Clean4shore's presence in this local area generated high praise from the local community through their social media outlets.

COVID19 restricted the program, allowing Simon and Jono to continue surveys and rubbish removal from Tuggerah, Budgewoi and Munmorah Lakes. Utilising the Community Environment Grant secured by Emma McBride, local Federal Member for Dobell.

School term four allowed for group participation with Youth off the Streets, Wadalba High and Tuggerah Lakes College's Entrance Campus out on the water, completing field trips. The anticipated flood debris earlier in the year was not prominent in these waterways, despite the fact that very high floodwaters generated from the February storms and possibly the larger debris was washed out to sea through The Entrance Channel.

Clean4Shore assisted Take3 from the Sea on their annual Corporate Environmental Day on Terilbah Island at North Entrance. Not a typical full morning clean up, but rather a fundraiser for Take3, highlighting the local litter issue and promoting networking services for Take3 and Clean4shore. Well done to those who participated in this activity.

A first for Clean4Shore was the evening clean up on Ourimbah Creek, with the local Ourimbah Venturers departing late in the afternoon for a cruise to the scenic backend of this waterway. Shopping trollies, storm debris, plastic bottles and cans all collected on a perfect evening. Great initiative by this group with outstanding leadership qualities displayed by the team. As with the Gosford Venturers, these organisations promote leadership, team building and communication skills that are encouraged in young members of our community, seeking employment opportunities.

The Tuggerah Lakes and Lower Lake Macquarie is an extensive waterway combining multiple Councils, State and Federal Electorates and National Parks. Further surveying is required, plus the engagement of stakeholders to ensure the entire foreshores are covered in a plan for litter removal and disposal.

| Tuggerah Lakes / Lower Lake Macquarie 2020 | | | | | |
|---|------------------------|-----------------|---------------|------------|-------------|
| Date | Group | Site | Weight Tonne | Volunteers | Total hours |
| 24/02/20 | Youth off the Streets | Crangan Bay | 640 | 8 | 32 |
| 02/03/20 | Youth off the Streets | Gwandalan | 280 | 8 | 32 |
| 24/03/20 | Clean4shore | Tuggerah Lakes | 120 | N/A | N/A |
| 16/04/20 | Clean4shore Survey | Elizabeth Bay | Nil | N/A | N/A |
| 09/07/20 | Clean4shore | Budgewoi Lake | 480 | N/A | N/A |
| 13/09/20 | Tuggerah Lakes College | Terilbah island | 350 | 10 | 30 |
| 23/10/20 | Youth off the Streets | Gwandalan | 340 | 10 | 25 |
| 10/11/20 | Tuggerah Lakes College | Magenta | 240 | 12 | 36 |
| 11/11/20 | Wadalba High College | Chittaway Point | 420 | 10 | 30 |
| 23/11/20 | Tuggerah Lakes College | Magenta | 240 | 7 | 21 |
| 07/12/20 | Ourimbah Venturers | Ourimbah Creek | 240 | 7 | 21 |
| 11 Field Trips | | | Totals | 72 | 227 |



Discarded fishing bait bags



Tuggerah Lakes College Entrance campus

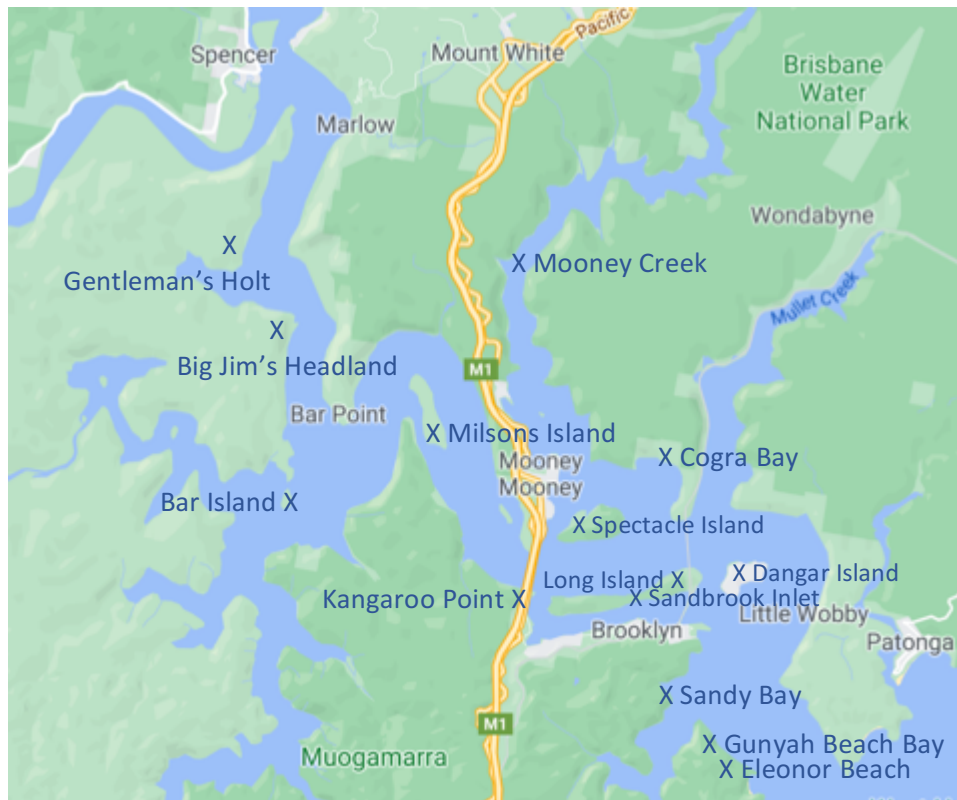


Tuggerah Lakes College Entrance Campus



Ourimbah Venturers

Hawkesbury River Summary



The Community Environment Program Grant secured by the Federal Member for Berowra, Julian Leeser, for Clean4shore, enabled participation by schools and community groups within the Hornsby Shire.

The early January period allowed surveys and non-school groups to enjoy this magnificent waterway presenting in pristine condition following the previous year's field trips. The Department of Juvenile Justice had a hard-working team demolish the blue timber boat at Bar Point. A team of rookies from the Macmasters Beach Surf Club attended Little Wobby and the isolated beaches near the mouth of the Hawkesbury River. "Oceanwatch" combined with Hornsby Council and the local oyster growers on a joint litter clean-up promoting engagement by the aquaculture industry, a positive "Tide to Tip" program.

The floods in February were devastating, as thousands of tree trunks previously affected by the drought and bushfires were swept into the water. The rising water levels congested with logs destroyed jetties and water structures along the Hawkesbury River. They deposited vast amounts of debris on the outer beaches of the Hawkesbury River and the Coastal Beaches North of the river mouth.

Clean4shore's first inspection assessed the safety and viability of entering this waterway with many larger logs towed and tied to the foreshore. Asquith Boys joined in the initial clean up removing plastic bottles and smaller items from these outer beaches. The Glen progressed further upstream to Marlow's returning with a boatload of rubbish. And then COVID19 restrictions.

Approvals were granted for the Clean4shore team to continue the flood debris clean up. They addressed more floating concrete covered pontoons, decking infrastructure, derelict vessels and working with local communities whilst our groups' attendance was restricted. Rob Moxham and his team of Mitchell, Lee, Jack and Brett provided valuable assistance with barges, crane offloading, storage and disposal delivery during this period.

The return of schools from COVID19 restrictions had the smiling faces of students back on the water tackling ongoing litter issues in Sandbrook Inlet, Long Island and Spectacle Island. Newcastle College, Loreto and Asquith Girls. Cherrybrook and Narara Valley High all participated late in the year. The logs scattered on the foreshore partially decayed, sunk or displaced themselves in a safer location as the Hawkesbury River again presented in pristine condition for the busy summer holiday period.

Issues of concerns

These pontoons are still laying in the Hawkesbury River, leaking polystyrene into the waterway and often washing up on the Central Coast beaches and inland lagoons. Central Coast Council and the EPA offer discount disposal, with the pontoons often weighing in excess of one tonne. Stronger stakeholder action is required to inspect existing pontoons and utilise compliance orders for removal.



Timber logs from the bushfires washed into the Hawkesbury by floodwaters and concrete covered polystyrene pontoons decaying in the water



Hawkesbury River 2020

| Date | Group | Site | Weight Tonne | Volunteers | Total hours |
|-----------------------|---------------------------|-------------------------|---------------|---------------|-------------|
| 09/01/20 | Dept. Juvenile Justice | Marlow's Vessel | .750 | 3 | 12 |
| 20/01/20 | Macmasters Beach SLSC | Little Wobby | .100 | 12 | 48 |
| 31/01/20 | Dept. Juvenile Justice | Bar Point Vessel | .960 | 4 | 14 |
| 13/02/20 | Clean4shore | Bar Point Flood Survey | 1.240 | 1 | 4 |
| 15/02/20 | MacMasters Beach SLSC | Little Wobby | .500 | 3 | 15 |
| 21/02/20 | Hawkesbury Oyster Growers | Milsons Point | .280 | 11 | 55 |
| 22/02/20 | C4S Community | Marlow's | Nil | 4 | 16 |
| 25/02/20 | The Glen | Gentlemans Halt | .700 | 4 | 16 |
| 07/03/20 | C4S Community | Cogra Bay Pontoon | 1.428 | 3 | 12 |
| 09/03/20 | Asquith Boys | Flint & Steel | .460 | 13 | 52 |
| 10/03/20 | Clean4shore | Sandbrook Pontoons | 1.760 | 1 | 4 |
| 15/04/20 | Community/ Council | Bar Point | .620 | 4 | 16 |
| 16/04/20 | Clean4shore | Long Island | .840 | 1 | 4 |
| 23/04/20 | Clean4shore / Community | Bar Point | 1.100 | 4 | 16 |
| 24/04/20 | Clean4shore | Bar Point Vessel | .340 | 1 | 4 |
| 07/05/20 | Clean4shore | Patonga flood debris | .760 | 1 | 4 |
| 08/05/20 | C4S | Kangaroo Point | .160 | 1 | 4 |
| 19/05/20 | Bar Point Community | Bar Point Vessel | .660 | 3 | 15 |
| 26/05/20 | Clean4shore | Cogra Bay Survey | Nil | N/A | n/A |
| 01/06/20 | Macmasters Beach SLSC | Cowan Creek | .760 | 6 | 28 |
| 08/06/20 | The Glen | Bar Point vessel | .920 | 4 | 16 |
| 24/06/20 | Clean4shore | Sandbrook Vessel | nil | N/A | N/A |
| 21/08/20 | Community Newcastle | Spectacle island | .480 | 8 | 36 |
| 22/10/20 | Loreto Girls College | Long Island Sandbrook | .440 | 14 | 42 |
| 20/10/20 | Narara Valley High | Spectacle/ Little Wobby | .360 | 14 | 56 |
| 17/11/20 | Asquith Girls High | Sandbrook Inlet | .600 | 21 | 81 |
| 01/12/20 | Cherrybrook High | Long Island | .280 | 12 | 42 |
| 16/12/20 | Clean4shore | Spectacle Pontoon | .740 | 0 | 0 |
| 28 Field Trips | | | Totals | 17.058 | 153 |
| | | | | 643 | |



Cherry Brook High





Hawkesbury Flood Debris



Hawkesbury Flood Debris



The Glen Hawkesbury Flood Debris



Derelict Vessel Removal



Hawkesbury Flood Debris



Loreto College Normanhurst
Sandbrook Inlet



Asquith Girls High



Narara Valley High

Hunter River Summary



2019 field trips and further early survey's within the Hunter River Wetland indicated major issues with litter and general rubbish, filtered and trapped in the Hunter River's mangroves and the adjoining smaller Islands. The initial field trip funded by the local Landcare group ventured into these mangroves, finding large deposits of plastic, glass bottles, polystyrene and hard plastic items, all out of sight from the waterway. The barge filled quickly on this first trip. However, the issue of sighting the litter for collection would require further survey's.

On this first field trip, a chance crossing of the Hunter River to the Tomago mangroves on the Northern bank revealed the massive volumes of litter and general rubbish that was to dominate the Hunter 2020 program. A second survey beneath the Hexham Freeway Bridges confirmed the extent of the rubbish, all mostly on the higher tidal marks, and again unseen from the water and the general public utilising and managing these wetlands. Surveys of the Ferry St mangroves near Sandgate suggested the litter issue extended throughout the Hunter Wetlands.

Hunter Local Land Services engaged Clean4shore in July to commence community-based field trips on the Tomago mangroves under the guidance and control of Volunteer Coordinator Alissa Rogers. Successful online bookings encouraged the public to become involved in the program, with the regular Facebook and Instagram posts receiving huge audiences. Port Stephen Council assisted with reduced litter disposal charges at the Newline Landfill facility. The task of delivering and offloading the collected rubbish to this facility, in the Clean4shore barge was challenging and demanding on our vehicles, plus time-consuming at the busy landfill cliff face. All staff at the Newline facility provided positive support.

From June to December fourteen field trips were completed, achieving staggering results as 19.930 tonne was removed from this wetland during 2020. Compiled statistics were completed following each field trip, revealing 1614 large bags of rubbish and 208,813 items collected. The Clean4shore barge returned heavily laden on each field trip, mostly covering a short distance with full bags being dragged from the tidal marks, often a hundred metres to the waiting barge. Commercial operators Banks Marine supplied a second barge with Baden, joining Simon to provide ongoing professional guidance to the hard-working volunteers.

Local State Members of Parliament Kate Washington and Tim Crakanthorp visited field trip sites praising the volunteers and offering support. Hunter Local Land Services staff joined Alissa Rogers on each field trip, gaining valuable program experience and understanding the task and challenges confronted by the volunteers on this program.

The conditions for the volunteers involved mud, mud and more mud as tyres, whitegoods, boating material and hundreds of larger hard plastic items were carried from the mangroves. The two Hexham Freeway Bridges over the Hunter River highlighted the extent of the litter issue, with 269 full bags of litter plus larger items weighing 2.90 tonne coming from two field trips covering only 150 metres.

The efforts of the community volunteers involved in the Hunter program is demanding and outstanding, requiring adjustments for school participation, as Maitland Christian College attending in August. The students walked the foreshores from the Tomago boat ramp West, supported by the Clean4shore barge. "More bags, more bags" was the call to the barge as 109 full bags plus larger items came out from the foreshore in very quick time—great effort by the students and highly recommended for further expansion to Hunter based schools.

The Hunter River program endured the COVID19 restrictions, full PPE and reduced close contact in our challenging environment was sufficient to meet compliance guidelines. The task ahead in 2021 will require additionally secured funding, further surveys and greater joint involvement by all stakeholders involved in the management of the Hunter Wetlands. The pleasing aspect of the program was the absence of "fresh" barcoded smaller items, a positive result from the State Governments "Return and Earn Scheme".

"The worst litter deposits in Australia", positively addressed by the community, under the guidance of Hunter Local Land Services with Clean4shore assistance, to achieve a remarkable outcome for the environment and an ongoing pledge to continue the program in 2021. Well done team.

| Hunter River 2020 | | | | | |
|--------------------------|----------------------------|----------------------|---------------|------------|-------------|
| Date | Group | Site | Weight Tonne | Volunteers | Total hours |
| 06/05/20 | Clean4shore Hunter LLS | Survey Ash Island | N/A | 1 | 4 |
| 13/06/20 | Hunter LLS Community | Ash Hexham Is Tomago | 1.090 | 15 | 60 |
| 17/06/20 | Clean4shore Survey | Tomago / Hexham | N/A | 1 | 3 |
| 04/07/20 | Hunter LLS / Community | Tomago / Hexham | 1.400 | 18 | 54 |
| 22/07/20 | Hunter LLS / Community | Tomago / Hexham | 1.920 | 21 | 63 |
| 25/07/20 | Hunter LLS / Community | Tomago / Hexham | .900 | 10 | 30 |
| 13/08/20 | Hunter LLS / Community | Tomago / Hexham | 2.080 | 18 | 72 |
| 05/09/20 | Hunter LLS / Community | Hexham / Bridge/East | 1.620 | 26 | 78 |
| 10/09/20 | Hunter LLS / Community | Hexham / Bridge/West | 1.280 | 8 | 28 |
| 24/09/20 | Hunter LLS / Community | Tomago bridge West | 1.480 | 10 | 30 |
| 25/09/20 | Clean4shore Survey | Heatherbrae | N/A | 0 | 0 |
| 15/10/20 | Hunter LLS / Community | Tomago Bridge West | 1.900 | 18 | 72 |
| 19/10/20 | Maitland Christian College | Tomago boat ramp | .940 | 9 | 36 |
| 29/10/20 | Hunter LLS / Community | Tomago / Heatherbrae | 1.600 | 13 | 36 |
| 12/11/20 | Hunter LLS / Community | Tomago / Heatherbrae | 1.420 | 12 | 36 |
| 24/11/20 | Hunter LLS / Community | Heatherbrae | 1.100 | 16 | 64 |
| 07/12/20 | Hunter LLS / Community | Heatherbrae / Hexham | 1.200 | 21 | 64 |
| 17 Field Trips | | | Totals | 199 | 730 |

Hunter River big loads





Tomago mangroves 5 km of this



Trevor big bag under the Hexham Bridge



Steff "wonder woman"



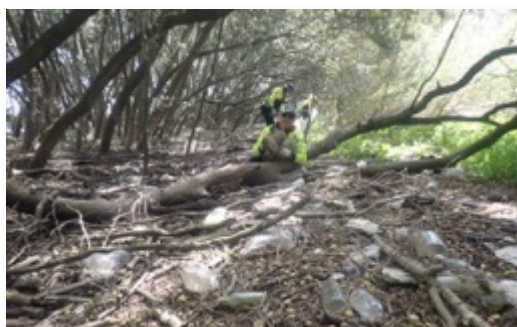
Maitland Christian College



Tomago mangroves five kilometre of rubbish



Tomago mangroves five kilometre of rubbish



Clean4shore – More than a litter reduction program!

Litter reduction is the primary aim of the Clean4shore program. The past ten years has generated a much bigger picture which is often overlooked by the general public. The items collected by the volunteers from a straw to a vessel, offer challenges both physically and mentally. “Why is this straw here, what can be done to eliminate them”. Mental challenge overcome by students successfully lobbying their canteens to eliminate this item.

The larger items require a physical challenge, team work, risk management, self- confidence to complete the task. Clean4shore highly promotes the team building aspects required within our program utilising the “can do approach”

The Central Coast’s “at risk” members of the community, including students, benefit from their positive contribution to the environment, together with improving individual community integration skills through active involvement with Clean4shore in an often remote setting. From a field trip start to finish, requires teamwork to achieve a goal and is the basis of a Clean4shore day out.



Terrigal High Brisbane waters with
Susan Iey & Lucy Wicks



Erina High School



St Edwards Christian Brothers



Polystyrene Pontoon Hawkesbury



Woy Woy campus students on derelict vessels



Hunter River offload Newline Landfill



Students removing jetty offcuts Woy Woy Bay



Empire Bay derelict vessel removal



Oyster product off load at Woy Woy landfill



What's a fridge doing in the Hawkesbury floods

Cool Shots





Statistics: Clean4shore Total Items Collected 2020

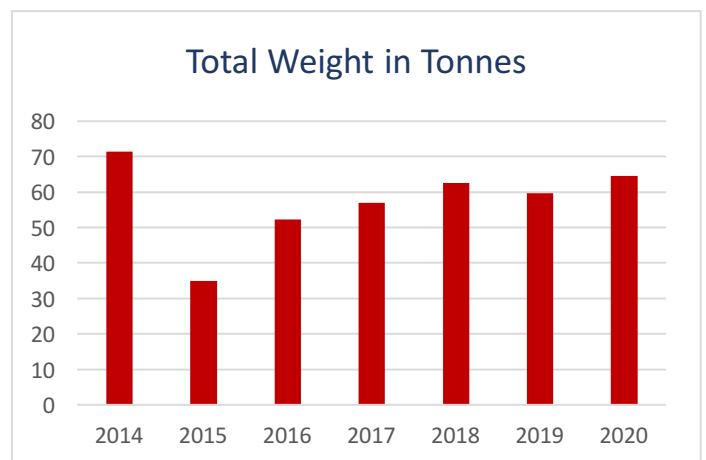
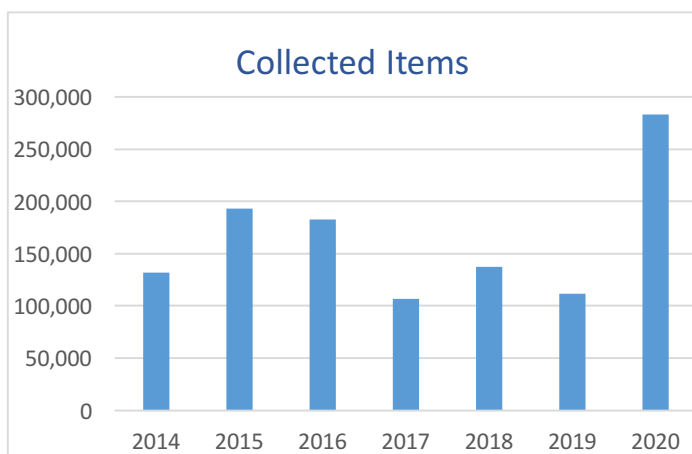
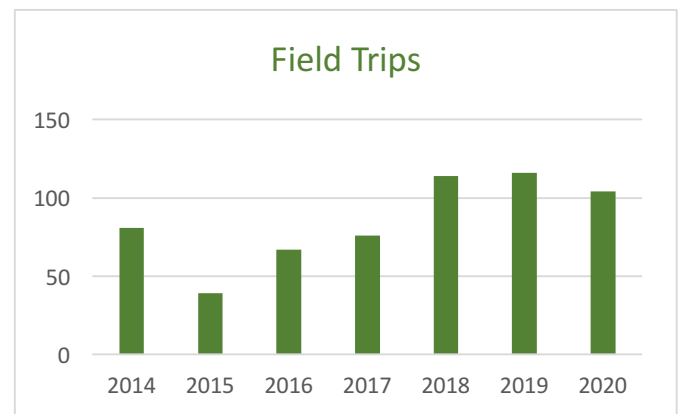
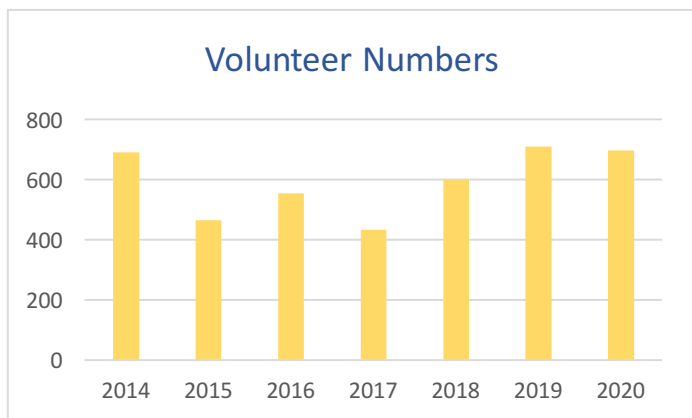
| Collected Items | Hawkesbury River | Brisbane Waters | Hunter River | Tuggerah Lower Lake Macquarie | Total |
|-------------------------------------|------------------|-----------------|--------------|-------------------------------|--------|
| Plastic Items | | | | | |
| Cigarette butts & filters | 4 | 64 | 130 | 4 | 202 |
| Cigarette lighters | 261 | 781 | 1702 | 261 | 3005 |
| Plastic pens, markers etc. | 113 | 382 | 350 | 113 | 958 |
| Plastic straws, cups, plates | 271 | 1865 | 1114 | 271 | 3521 |
| Plastic Toothbrushes, combs | 14 | 104 | 147 | 14 | 279 |
| Plastic toys, ribbons, clips | 355 | 1264 | 1628 | 355 | 3602 |
| Plastic bleach & cleaner bottles | 84 | 188 | 942 | 84 | 1298 |
| Plastic lids & tops, pump spray | 380 | 1769 | 1739 | 380 | 4268 |
| Personal care & packaging | 33 | 107 | 130 | 33 | 303 |
| Plastic bags complete | 270 | 223 | 494 | 270 | 1257 |
| Plastic containers: oil, chemical | 117 | 170 | 620 | 117 | 1024 |
| Plastic drink bottles | 2127 | 6167 | 32,968 | 2127 | 43,389 |
| Plastic packaging food | 474 | 5526 | 2512 | 474 | 8986 |
| Plastic wrap non food | 49 | 167 | 429 | 49 | 694 |
| Strapping band scraps | 2 | 94 | 112 | 2 | 210 |
| Strapping band whole | 4 | 12 | 41 | 4 | 61 |
| Plastic bait & tackle bags | 163 | 496 | 599 | 163 | 1421 |
| Plastic bait containers & lids | 92 | 298 | 582 | 92 | 1064 |
| Commercial fishing | 0 | 4 | 0 | 0 | 4 |
| Cylume glow sticks | 0 | 0 | 7 | 0 | 7 |
| Fishing line in metres | 34 | 61 | 148 | 34 | 277 |
| Fishing items (lures, floats, rods) | 73 | 163 | 266 | 73 | 575 |
| Rope & net less than 1 metre | 98 | 110 | 307 | 98 | 613 |
| Rope plus metres | 26 | 42 | 42 | 26 | 136 |
| Plastic bits & pieces hard & solid | 801 | 3620 | 11,399 | 801 | 16,621 |
| Plastic soft bits bag & wrap | 1809 | 9707 | 11,973 | 1809 | 25,289 |
| Remnants burnt plastic | 434 | 1851 | 2,939 | 434 | 5658 |
| Polystyrene Items | | | | | |
| Foam Buoys | 25 | 28 | 34 | 25 | 112 |
| Foam cups , food & trays | 163 | 506 | 1207 | 163 | 2039 |
| Polystyrene insulation pieces | 2372 | 5306 | 738 | 2372 | 10,788 |
| Other Materials | | | | | |
| Oil globules and tar balls | 0 | 0 | 0 | 0 | 0 |
| Sanitary (nappies etc.) | 34 | 24 | 262 | 34 | 354 |
| Shoes leather and fabric | 45 | 118 | 498 | 45 | 706 |
| Glass & Ceramic Items | | | | | |
| Fluorescent tubes and bulbs | 7 | 12 | 86 | 7 | 112 |
| Glass beer bottles | 286 | 632 | 8536 | 286 | 9740 |
| Glass jars | 14 | 30 | 920 | 14 | 978 |
| Glass or ceramic broken | 313 | 372 | 1180 | 313 | 2178 |
| Glass wine spirit bottles | 135 | 455 | 930 | 135 | 1655 |

| Cloth Items | | | | | |
|----------------------------------|---------------|---------------|----------------|---------------|----------------|
| Binding , string & cord normal | 41 | 137 | 490 | 41 | 709 |
| Cloth, clothing, hats towel | 85 | 230 | 487 | 85 | 887 |
| Metal Items | | | | | |
| Aerosol Cans | 39 | 165 | 222 | 39 | 465 |
| Aluminium cans | 339 | 1566 | 4380 | 336 | 6621 |
| Foil wrapping , bladders/ alfoil | 4 | 34 | 150 | 4 | 192 |
| Metal bottle caps | 0 | 5 | 9 | 0 | 14 |
| Metal fishing items | 0 | 17 | 24 | 0 | 41 |
| Tins (under 4 litres) | 24 | 35 | 324 | 24 | 407 |
| Paper Items | | | | | |
| Newspaper, magazines | 10 | 70 | 567 | 10 | 657 |
| Paper and cardboard packaging | 23 | 117 | 382 | 23 | 545 |
| Telstra packs and drink cartons | 1 | 29 | 82 | 1 | 113 |
| Rubber Items | | | | | |
| Rubber balloons, balls and toys | 683 | 3052 | 6204 | 683 | 10,622 |
| Rubber footwear and thongs | 193 | 521 | 2150 | 193 | 3057 |
| Rubber remnants | 399 | 1041 | 2236 | 399 | 4075 |
| Wood Items | | | | | |
| Brooms, brushes | 7 | 8 | 136 | 7 | 158 |
| Processed timber, pallets | 113 | 124 | 47 | 113 | 397 |
| Wood sticks, pencils, matches | 0 | 0 | 12 | 0 | 12 |
| Total Smaller Items | 13,440 | 49,869 | 203,813 | 13,440 | 280,562 |

Plus Additional Larger & Commercial Items Collected

| Collected Item | Hawkesbury River | Brisbane Waters | Hunter River | Tuggerah Lower Macquarie | Total |
|---------------------------------------|------------------|-----------------|--------------|--------------------------|-------|
| Pontoons (concrete polystyrene) | 5 | 1 | | | 6 |
| Oyster plastic (trays, baskets) | 30 | 243 | | 1 | 274 |
| Oyster plastic mesh pieces | | 16 | | | 16 |
| Nylon shade cloth & tarpaulins | | 7 | 4 | | 11 |
| Car / Truck Tyres | 26 | 267 | 219 | 41 | 553 |
| Boat complete timber | 5 | | | | 5 |
| Boats complete fibreglass | 7 | 15 | | 2 | 24 |
| Boat inflatable rubber | 3 | 1 | 1 | 1 | 6 |
| Boating Parts (marine ply) | 18 | 18 | 26 | 1 | 63 |
| Boating Parts: alloy, seating | 4 | 3 | | 4 | 11 |
| Fibreglass: surfboards, canoes | 2 | 13 | 24 | 5 | 44 |
| Foam: boogie, seating, eski | | | | 2 | 2 |
| Boating Aluminium "Tinny" | | 2 | | 1 | 3 |
| Metal: steel, drums, roof, trolley, | 14 | 16 | 13 | 16 | 59 |
| Metal household whitegoods | 11 | 3 | 24 | | 38 |
| Metal Crab traps | 3 | 35 | | 22 | 60 |
| Metal: bikes/scooters/ gas bottles | 2 | 8 | 13 | 1 | 24 |
| Plastic: buckets, pipe, drums, crates | 82 | 133 | 315 | 59 | 589 |
| Plastic sheeting | 2 | 3 | 16 | 4 | 25 |

| | | | | | |
|--------------------------------------|---------------|---------------|----------------|---------------|----------------|
| Plastic large: buoys/signs/bins | 10 | 1 | 19 | 1 | 31 |
| Foam: mattress, lounges, chairs | 17 | 19 | 45 | 15 | 96 |
| Polystyrene large: food boxes | 25 | 11 | 139 | | 175 |
| Marine carpet | 1 | | | 2 | 3 |
| Marine/car batteries | 2 | | | | 2 |
| Maritime floatation foam | 7 | | 1 | | 8 |
| Timber: building/furniture/pallets | 5 | 32 | 9 | 14 | 60 |
| Treated pine logs | 19 | 34 | | | 53 |
| Timber marine piers (recycled) | 2 | 34 | | | 36 |
| Timber flood debris (Tonne) | 1.050 | 12.340 | | | N/A |
| Outdoor: camping/bedding | | 4 | 14 | 12 | 30 |
| Electrical wiring (Metres) | 100 | | 74 | | 174 |
| Industrial rubber/tyre tube | | | 15 | | 15 |
| Industrial boating rope | | | 6 | | 6 |
| Larger Items Total | 919 | 916 | 977 | 204 | 2402 |
| Plus Smaller Items Collected | 13,440 | 49,869 | 203,813 | 13,440 | 280,562 |
| Total Items Collected in 2020 | 14,359 | 50,785 | 204,790 | 13,644 | 282,964 |



Moving Forward 2021

Clean4shore is in a solid position to confront the challenges that will arise in 2021. The Federal Government's Environment Restoration Grant, secured in 2020 and well managed by Central Coast Council, will provide security and stability of our operations through to 2024. The successful grant submissions under the Community Environment Program, Stronger Community Program and Community Building Partnership presented in 2020 will be completed early in 2021, hopefully assisted by an easing of the COVID19 restrictions. Financially Clean4shore is very secure.

An equipment upgrade of the barge with a larger motor is due in 2021, plus the purchase of the larger trailer will assist with the heavier loads, especially those from the Hunter River. All personal protection equipment that received extensive use during the 104 field trips in 2020 remains in good order, with approved current funding for possible replacement. COVID19 compliance and possible restrictions may limit or reduce the involvement of our high schools. Further community involvement on local field trips, highlighted by the success in the Hunter River program, may be required as a substitute for the schools.

Clean4shore's attendance within our grant boundaries on the Hawkesbury River, Brisbane Waters and Tuggerah Lakes has significantly reduced the volumes of litter on these waterways. Community initiatives, including the state Government "Return and Earn" scheme plus the recognition of State and Federal Governments to address litter reduction policies, will further reduce littering and industrial dumping. Clean4shore current results on the Hunter River resemble those on the waterways mentioned above from 2014 to 2020. Consistent field trips over time will resolve the Hunter River litter issue.

Surveys completed in 2019 within the Port Stephens waterways suggested the need for coordinated action on foreshore litter. Funding received by Clean4shore during 2020 prevented further expansion, yet community groups are already in place to commence an approved program. Port Stephens Council and Hunter Local Land Services successfully coordinated the ongoing Hunter River clean up with a possibility of assisting expansion into Port Stephens pending approvals for disposal and land agreements.

The invasive weed management inclusion into the Clean4shore program launched in 2020 will require more incentive and promotion. COVID19 greatly restricted participation by community bushcare volunteers with the school student on our field trips. Local bushcare group "Bouddi Bushcare" received assistance from Clean4shore's barge, under the "Floating Landcare" program for Simon to transport volunteers to more isolated locations. Central Coast Council and National Parks support this program which can be expanded to include further Bushcare and Landcare groups in 2021.

2020 presented many challenges to the program with drought, bushfires, floods and COVID19. Throughout this Clean4shore has delivered positive results through the availability of funding grants. The continual expansion of the program requires a stronger structure at the base management level of our organisation in order to remain compliant. This will be our major goal for Clean4shore in 2021.

Graham Johnston (Jono)

Clean4shore's continual success in delivering a quality program during 2020 is heavily reliant on the support, on and off the water, of four key stakeholders:



Lucy Wicks & Susan Ley
(Australian Federal Government)



Alissa Rogers Hunter Local Land Services



Warren Brown Central Council
Senior Estuary Officer



Simon Funnell barge operation,
risk management & student mentoring