



# Positive Action for a Cleaner Solway

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## Final Report

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Figure 1:  
Positive Action for a Cleaner Solway achievements

## Introduction

The broad aim of the Positive Action for a Cleaner Solway Project was to encourage positive action contributing to over 200 miles of cleaner coast in Dumfries and Galloway.

The objectives of the project were to:

- Remove waste from the marine environment with volunteers.
- Improve data collection of marine litter removed by volunteers and analyse data to understand type and source of marine litter.
- Collect and analyse data on social impacts of beach clean volunteering.
- Raise awareness of marine environmental issues with beach clean campaigns and workshops/events.
- Engage with communities using a participatory and inclusive approach to develop content for an exhibition.
- Deliver a travelling exhibition aimed both at local communities and visitors to the area.
- Develop educational material based on the Solway Hoard exhibition.



Figure 2: Workshop, Logan Botanic Garden

Remove waste with volunteer groups and improve data collection.



Figure 3: Volunteers organised by Eco Warriors, Southernness

Solway Firth Partnership worked with existing volunteer groups to promote their beach cleans and gather data (number of volunteers / amount of litter collected / length of beach cleaned). These and other beach cleans have been publicised on the Solway Firth Partnership Facebook page, as well as mapped on interactive maps <https://www.solwayfirthpartnership.co.uk/environment/beach-clean-map-2/>. These maps have been further developed to advertise upcoming events, provide information for those looking to get involved, highlight areas not recently covered as well as helping to gather information about volunteer effort and data on what has been collected. Skips were provided for groups where particularly large quantities of marine litter needed to be collected. Details on the information collected can be found in Appendix 1.

Volunteer groups involved and their beach cleans promoted included ONUS SW Scotland, Mac-can, Wigtown Bay Rowing Club, RSPB Mersehead, D&G Eco Warriors, Rotary clubs and U3a beach clean groups.

Volunteer group beach cleans supported or attended by SFP include events at Auchenmalg, Brighthouse Bay, Cairndoon, Fauldbog Bay, Glencaple, Knock Bay, Larbrax, Isle of Whithorn, Mersehead, Mullock Bay, Newbie, Port Logan, Port William, Rascarrel, Sandyhills, Southernness and Stranraer.

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**During the 7 months project, 42 beach cleans were undertaken by organised groups in Dumfries and Galloway involving 1,236 volunteer hours (618 volunteers x 2 hours).**

**Debris removed from beaches weighed 10,068kg (including 6 skips filled).**

**Length of beach cleaned 33.4km (21 miles).**

**An average of 301kg per km was removed (the density of debris on individual cleans ranged enormously - from 1,487kg per km to 10kg per km).**

## Collect and analyse data on social benefits of beach cleans.



Figure 4: Questionnaire filling at Brighthouse Bay

A paper and online questionnaire was used by Solway Firth Partnership to collect data on what motivated volunteers to participate in beach cleans and how they affect what participants feel. The data collected from sixty-seven completed surveys help us understand what health and well-being benefits people gain from being involved in positive volunteer action.

Evaluation showed that almost all volunteers (99%) are motivated by the desire to improve the health of the environment, and (97%) find beach cleans a fulfilling activity. Most participants are motivated by gaining a better understanding of coastal issues (96%) and feeling part of the community (96%). Most agreed that beach cleans are good for keeping active but only a third (31%) found it extremely important, perhaps indicating that beach cleans do not necessarily have to be physically demanding. Although over 80% felt useful this was not reflected in their optimism for the future.

Perhaps the most enlightening was volunteers sharing their own reasons for taking part. These included the positive impact on their mental health by giving them a reason to get outside and onto the coast, supporting their local community, providing a learning experience for their families and generally being empowered to help their environment.

Further details on the information collected can be found in Appendix 2.

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*"It gets people in the community to work together which strengthens the community"*

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## Raise awareness of the source of marine debris



Figure 5: Climate Action Annan Christmas Fayre

A talk was delivered to Georgetown WRI on the topic of beach combing and raising awareness of the problem of plastic in the marine environment.

Solway Firth Partnership had displays raising awareness of marine debris at Newton Stewart Green Fayre, Climate Action Annan Christmas Fayre, Scottish Learning satellite event at Dumfries and Galloway College, Dumfries and Galloway Wild Goose Festival Dumfries Hub drop-in sessions.

The project activities provided an opportunity to create news stories about positive action by beach clean groups and highlight the source of marine debris. Items found on beach cleans where a location of the source could be identified included lobster bait jars from Canada, plastic hot chocolate containers from Spain, buoys from USA, Gurnsey and Isle of Man and a hard hat from South Wales. Evidence of debris travelling long distances down rivers into the sea included wheelie bins from Stockport and Burnley.

Positive stories have appeared on SFP social media including Facebook page, Instagram, Twitter and LinkedIn, website news and e-newsletters as well as featuring in the SFP Tidelines magazine Winter 2022 edition and is to feature in the Spring 2023 edition available on the website and printed magazines distributed widely in the Solway area.

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*"I think kids from all schools should go and do a clean up somewhere.  
They would get a better understanding of the problem"*

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## Engage with communities.



Figure 6: Workshop, Dumfries Museum

Solway Firth Partnership and Glasgow University Waste Stories developed the concept of the Solway Hoard from the Plastic Age. This approach explains the provenance of ‘treasures’ displayed in a museum set 1,000 years in the future to help us take a fresh look at the role plastic plays in our everyday lives.

Museum of the FutureNow was commissioned to run a series of workshops to develop content for an exhibition using marine plastics collected on beach cleans as the inspiration for creating stories from the future. Three workshop sessions were held at Logan Botanic Garden, Mill on the Fleet and Dumfries Museum. The creative process encouraged participants from a wide variety of backgrounds (beach cleaners, creative writers, university students) to imagine the future and explain why a mundane waste material had become a treasure with an important role in history. The stories included tales involving protest, agriculture, religion, and crime set in locations ranging from Stranraer to Shanghai. The stories were collated by Museum of the FutureNow who created the context for the stories and curated a travelling exhibition.

A planned fourth workshop was cancelled due to a lack of participants in the run up to Christmas. However, an additional workshop session with communication students was run by Glasgow University Waste Stories at Dumfries and Galloway College. The workshop encouraged students to select items they found on the beach and write story boards that will become animated films looking back at plastic from the future.

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*“The amount of plastic on the beach is horrifying. Everyone should see this.”*

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Create an exhibition.



Figure 7: Solway Hoard from the Plastic Age exhibition.

Marine debris collected by beach cleaners was selected by Museum of the FutureNow and presented at workshops as important museum artefacts. Each item was photographed as if they were precious objects and the stories written were collated and curated to produce an exhibition. This was inspired by the Galloway Hoard exhibition of Viking treasures discovered in Dumfries and Galloway that had appeared at Kirkcudbright Galleries. Gallery space was secured at the same venue to display exhibition panels and artefacts in cabinets as if in a museum 1,000 years in the future.

The items were analysed using different techniques at Heriot-Watt University, Edinburgh and during the Plastics exhibition at the V&A Museum, Dundee.

The exhibition was accompanied by a booklet with the stories for each artefact and are available on the Solway Hoard webpage hosted by Museums of the FutureNow. <https://museumsfuturenow.org/the-solway-hoard/>

The exhibition has attracted media interest from television, radio, magazines and newspapers. During the three weeks the exhibition was staged it had over one thousand visitors and was very well received.

It is hoped that the exhibition can be shown at other locations in the region and further afield.

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*“A novel and imaginative project. Well-executed for a vital cause.”*

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## Education materials



Figure 8: Annan Academy beach clean found a buoy from the USA.

The project has also engaged with education providers by organising beach cleans:

- Barony College (6 participants on a beach clean with a focus on nurdles and micro plastics at Sandyhills).
- Annan Academy (15 participants on two beach cleans at Newbie).
- Dumfries and Galloway College, Dumfries (19 participants on a beach clean at Newbie). The beach clean was followed by session led by Glasgow University Waste Stories to develop stories inspired by beach plastics for an animation project by visual communication students.

Beach cleaning resource *Solway Sea Chest Resource Box* with activity booklet have been provided to 4 primary / pre -schools (Shawhead, Dunscore, Kirkcolm and New Abbey).

Glasgow University Waste Stories developed *The Solway Hoard Exhibition Follow Up Activities* booklet. The activities involved detective work to find out about objects in the Solway Hoard and ask students to use their own creativity and imagination to develop the story, and to create their own future museum. The activities can be adapted for different ages and can be used as individual or group activities and will feature in the Dumfries and Galloway Learning for Sustainability Conference. The activities aim to develop students as Confident Individuals, Successful Learners and Responsible Citizens.

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*“The children have loved working through your resources and are looking forward to getting onto the beach.”*

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## Future projects?



Figure 9: Solway Hoard exhibition launch event

Solway Firth Partnership has successfully collaborated with beach clean groups to remove marine debris, gather data, and promote positive action by volunteers to raise awareness of plastic pollution. Future projects will build on the achievements of Positive Action for a Cleaner Solway.

Future activities include:

- ▶ Strengthen partnership working with volunteer groups by involving them in physical surveys of the coast to identify locations that need cleans and measure progress since the “Scrapbook” survey of 2018.
- ▶ Map location of sources of marine debris.
- ▶ Target involvement of individuals and informal groups of beach cleaners to gather data on effort, debris collected and health and well-being.
- ▶ Organise visits to sorting and recycling facilities so that volunteers can see what happens to the material removed by beach cleans.
- ▶ Develop opportunities to hold the Solway Hoard exhibition at locations in Dumfries and Galloway and further afield.
- ▶ Promote and expand use of the Solway Hoard learning activity resources to improve understanding of the link between climate change and marine debris and explore place-based resilience needs.

## Appendix 1

### Beach Clean Activity Data

Date of clean	Place of clean	Group	Vols	Bags	Kg	Length cleaned	Density kg/km	Record
08/09/22	Isle of Whithorn	Rowing club	5	1	5	500	0.01	FB
11/09/20	Port Logan	ONUS	10	10	50	900	0.05	FB
17/09/22	Mersehead	Ecowarriors	22	20	100	1500	0.06	Photos / FB
25/09/22	Auchenmalg	ONUS	12	4	20	500	0.05	Photos / FB
02/10/22	Brighthouse	Ecowarriors	9	7	35	600	0.05	Photos / FB
16/10/22	Larbrax	ONUS	12	12	60	800	0.07	FB
20/10/22	Isle of Whithorn	Rowing club	5	1	5	500	0.01	FB
23/10/22	Carsethorn	Ecowarriors	9	7	35	600	0.05	FB
30/10/22	Stranraer	ONUS	17	14	70	1200	0.05	Photos / FB
08/11/22	Isle of Whithorn	Rowing club	7	1	5	500	0.01	FB
13/11/22	Port Logan	ONUS	14	15	75	900	0.08	Photos / FB
20/11/22	Cairndoon	Maccan	27	skip	2380	1600	1.48	FB
20/11/22	Mulloch	Ecowarriors	55	trailers	1400	1200	1.16	Photos / FB
20/11/22	Isle of Whithorn	Rowing club	5	1	5	500	0.01	FB
23/11/22	Sandyhills	Barony College	6	1	5	300	0.01	Photos
29/11/22	Mersehead	RSPB volunteers	no data					Blog
04/12/22	Port Logan	ONUS	12	16	80	700	0.11	Photos / FB
02/01/23	Portwilliam	Sea shepherd	18	16	80	700	0.11	Photos / FB
02/01/23	Isle of Whithorn	Rowing club	17	15	75	600	0.12	Photos / FB
08/01/23	Newengland	ONUS	14	4	20	800	0.02	Photos / FB
08/01/23	Fauldbog	SFP	33	skip	1420	900	1.57	Photos / FB
12/01/23	Newbie	Annan Academy	7	3	15	400	0.03	Photos
12/01/23	Sandyhills	U3a	4	3	15	1400	0.01	Photos
17/01/23	Mersehead	RSPB volunteers	no data					Blog
19/01/23	Newbie	Annan Academy	8	4	20	400	0.05	Photos

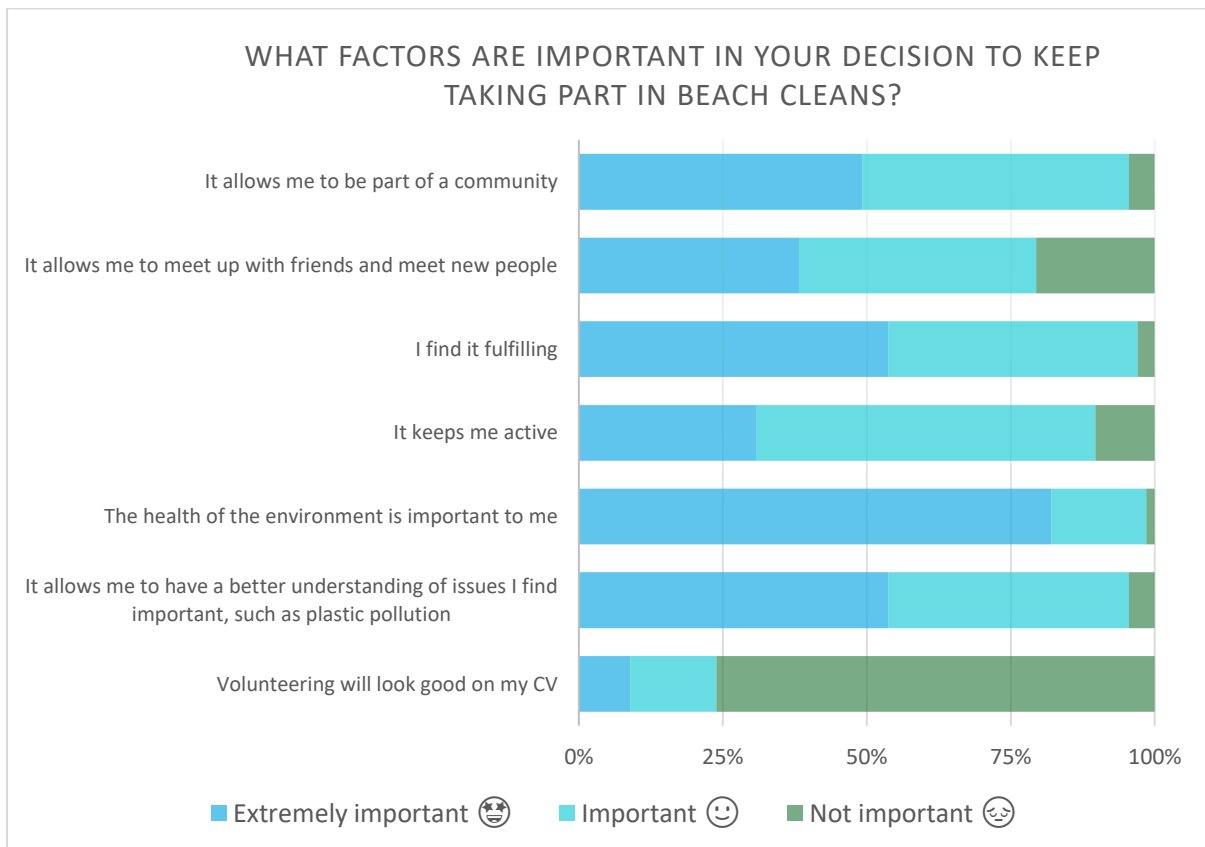
22/01/23	Larbrax	ONUS	10	12	60	800	0.07	FB
22/01/23	Southernness	ONUS	31	30	150	1300	0.11	Photos / FB
29/01/23	Isle of Whithorn	Rowing club	10	2	10	500	0.02	FB
05/02/23	Port Logan	ONUS	23	33	165	900	0.18	FB
05/02/23	Rascarrel	Ecowarriors	38	skip	580	1400	0.41	Photos / FB
15/02/23	Isle of Whithorn	Rowing club	5	2	10	500	0.02	FB
19/02/23	Float	ONUS	22		283	500	0.56	FB
25/02/23	Brighthouse	U3a	20	30	150	500	0.3	FB
05/03/23	Knock	ONUS	21		400	700	0.57	Photos / FB
15/03/23	Caerlaverock	WWT	11	skip	700	2000	0.35	email
18/03/23	Newbie	Ecowarriors	20	skip	420	1000	0.42	Photos / FB
18/03/23	Miltonpoint	Sea shepherd	15	15	75	900	0.08	FB
18/03/23	Stranraer	ONUS	10		150	900	0.16	FB
19/03/23	Glencaple	Inshore rescue	20	skip	780	2000	0.39	Photos / FB
24/03/23	Barshalloch	Maccan	10	11	55	800	0.07	FB
25/03/23	Brighthouse	u3a	14	11	55	500	0.11	email
25/03/23	Sandhead	ONUS	10	10	50	200	0.25	FB
TOTALS			618+		10.06 tonne	33.4 km		

## Appendix 2

### Beach Clean Volunteer Health & Well-being Questionnaire Data

#### Why did you first volunteer?

- Doing it with family members
- Always wanted to help out
- The state of the oceans are important to humanity - started as a sea shepherd vol 7+ years ago
- Desire to make an improvement to beaches
- I live on the coast and over the years noticed how badly littered our coast has become, so started cleaning it and kept cleaning it and roped others into helping
- Because I care
- I have always picked litter I found a group in the area I was living and joined them
- Introduced by a long term volunteer
- I wanted to do something to preserve the environment I value
- Engage in local community
- Met a nice lady cleaning a beach
- To be able to do more for the environment
- Wanted to help out
- To help clean up the coast
- Spend time most every day on the Rhins coastal path. I see so many things washed up.
- Preservation and conservation enthusiast. Amazing learning experience for children
- I hated seeing all the rubbish lying on the beaches and other areas
- Something to do and tidy up the countryside
- To help the environment
- To be part of a community and educate my son
- Concern for the environment
- Concerned about environment and plastic pollution
- Cause I hate to see waste
- Because I love the ocean and wanted to help
- Very environmentally aware \_ We have to start somewhere "Small" becomes "Large"
- To help clean up our environment
- Going for walks and seeing all the litter made me sad hence needed to do something
- I came with wastestories.org.uk
- My brother asked me when visiting for a weekend
- To meet new people, enjoy a different head space, make a difference to native wildlife and the environment
- Part of U3A volunteering
- Because I care for the environment
- I thought it a very worthwhile important activity
- With friends



**Are there any other factors which you feel are important in your decision to keep taking part in beach cleans?**

- Supporting local community
- I fish from these beaches  
It is good to have a net positive impact
- I just like to do my bit and it is nice to do it in a group
- Benefits mental health and relaxation
- Cake!
- Good for mental health
- Reason to get outside  
Making a positive contribution
- Getting out on the coast
- Helping Wildlife/the Ocean/the damage caused by plastic and rubbish in the sea/helping each other to help our community.
- Educational
- Something I can do other than complain
- It is important to make a difference, educate and promote the importance of plastic pollution
- Feel I am giving something back to the community
- Education for my son
- I'm helping the population
- my bit for the environment
- It makes me aware of how much I need to recycle
- Get me out in the fresh air
- The right thing to do

**What plastic items do you dislike the most to find on a beach?**

- Balloons x7
- Fishing nets / gear x6
- Rope (polypropylene rope tangles and broken bits) x6
- All of it x5
- Bottles x5
- Fishing Line x5
- Sanitary products x4
- String/curling ribbon x4
- Straws x3
- Wet wipes x3
- Dog poo bags x2
- Nurdles x2
- Nappies x2
- Micro plastics x2
- Products which were designed to be disposable
- Black bits of lobster pots
- Any single use plastic
- Lorry Driver's Tizer!
- Cigarette lighters
- Trawler waste
- Bottle tops
- Cotton Buds
- Disposable cups
- Plastic toys
- Used condom
- Film
- Kong Wubba
- Polystyrene that breaks into small pieces
- Barrels
- Lighters

**What do you consider any added social or community benefits to be.**

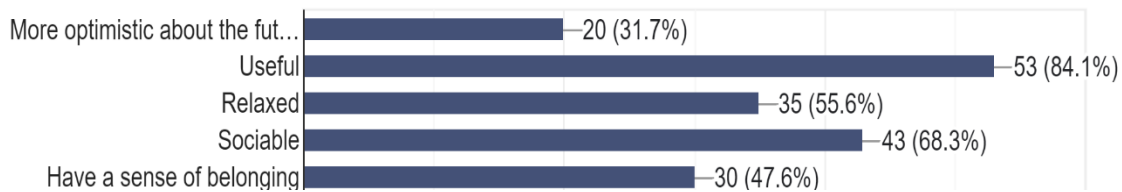
- Working together with other members of the community
- Meeting new people
- Good for team spirit
- Physical
- Mental well being
- Health
- Positivity
- Feeling like you have contributed
- Positive reflection on the community
- 'working' in a group
- Chat and laughter
- Pride in my area and the world I live in
- Other people see what is being done and join the cause
- Helps to spread the message about local interest groups/activities
- Getting to know others with a similar interest
- Bringing communities together
- Community cohesion from working together with like minded people
- For the greater good of the community
- A sense of self worth
- I believe that it benefits the community as it shows people care. It
- A great way to exchange ideas
- It gets people in the community to work together which strengthens the community
- Helps give our town a good name for having tidy areas rather than areas that are covered in rubbish
- Looks nicer which helps attract tourists
- Absolutely, it is slow paced as much or as little interaction as you are comfortable with and open to anyone.
- Raise awareness
- Meeting like-minded folk

- Opportunity to visit a lot of beaches
- Encourage more involvement
- Mental health
- Trying to solution find to stop plastic ending up in the sea
- Sense of being part of a team
- Meeting likeminded people who share common interests
- Good to be part of a group.
- Onlookers might take part and join group
- Safer for others to take children and dogs to
- It Makes the Local area Look nicer and as such makes it a nicer place to live

As well as these comments a further 8 individuals agreed that there were added social or community benefits without giving specific examples

Think back to a recent beach clean. How did you feel at the end? (Tick all that apply)

63 responses



In addition, the following feelings were identified:

Energised x2

My first beach clean - I had a lovely time

Brings together a diverse group of individuals with a mutual interest in improving / maintaining our coastline

Sad about the amount in one small space

Sad about the pollution

Enjoying nature and socialising

Disappointed (still with amount of \*\*\*\*)

Knowing that we have helped

We all have to help

Not just me that cares about the environment

Have a sense of belonging,

Always a sense of dismay at the amount of rubbish and the potential harm to wildlife

74% of those the 61 people who responded were a member of either a beach cleaning or a community group and 15% were attending specific one-off events.

Although there was an option to give further personal details most preferred not to give this information. As a result, the data collected of personal details was from a much smaller and unrepresentative sample.