INTERNATIONAL PLASTIC PELLET COUNT 2026

U.S. PIRG Education Fund

WATERKEEPER® ALLIANCE

ENVIRONMENT AMERICA RESEARCH & POLICY CENTER

NURDLE PATROL.org

ENVIRONMENTAL ACTION SINCE 1970

5 GYRES SCIENCE TO SOLUTIONS

OCEANA

SURFRIDER FOUNDATION.

American Bird Conservancy

Student PIRGs

TROUT UNLIMITED

COMMUNITY ACTION WORKS

EARTHDAY.ORG

nylc national youth leadership council

#breakfreefromplastic

PLASTIC TIDE TURNERS WAVE MAKERS WAGGGS - UNEP

NWF NATIONAL WILDLIFE FEDERATION

ALLIANCE for the GREAT LAKES

WORLD ASSOCIATION OF GIRL GUIDES AND GIRL SCOUTS

Executive Summary

PLASTIC PELLETS, TINY BEADS that serve as the foundational material for countless plastic products, are a widespread yet often overlooked source of pollution. Despite their harmful environmental impact, discharges and spills of these pellets, also known as nurdles, are rarely tracked or well regulated. This report highlights findings from the second International Plastic Pellet Count, a global citizen science initiative aimed at measuring the scale of this pollution near waterways. In May 2026, volunteers at approximately 249 events across 6 countries—including 31 states and Washington, D.C.— collectively found and documented 1,073,433 pellets worldwide. This year's results have brought the ongoing plastic pollution crisis into sharper focus, with a nearly 22-fold increase in total findings.

Each year, an estimated 445,970 metric tons of pre-production plastic pellets enter the environment.[1] Around the world, there are limited requirements to report spills, as they are not officially classified as hazardous materials.[2] The lack of government tracking of pellet pollution leaves a gap that makes citizen science efforts like the International Plastic Pellet Count essential.

Pellet pollution frequently occurs throughout the plastic supply chain, including during manufacturing, storage, and transportation.[3] Pollution can occur through permitted discharges from factories into wastewater, as well as acute spills such as the loss of shipping containers overboard or train derailments.[4] Once released, the small size allows them to pass easily into waterways.[5] This poses a serious environmental threat as these tiny plastic pellets are extremely difficult to clean up and can be mistaken for food by fish and wildlife, leading to harmful consequences.[6]

By documenting the global presence of this pollution, the International Plastic Pellet Count underscores the urgent need for stronger regulations and enforcement to prevent these materials from entering the environment, as well as a broader reduction in plastic production to protect ecosystems and human health worldwide.

[1] Galgani, F., & Rangel-Buitrago, N. (2024). White tides: The plastic nurdles problem. Journal of Hazardous Materials, 470, 134250. https://doi.org/10.1016/j.jhazmat.2024.134250

[2] Karlsson, T. M., Arneborg, L., Broström, G., Almroth, B. C., Gipperth, L., & Hassellöv, M. (2018). The unaccountability case of plastic pellet pollution. Marine Pollution Bulletin, 129(1), 52–60.

[3] The Pew Charitable Trusts & SYSTEMIQ. (2020, July). Breaking the Plastic Wave: A comprehensive assessment of pathways towards stopping ocean plastic pollution (S. Reddy & W. Lau, Eds.)

[4] Galgani *supra* note 1.

[5] *Id*.

[6] Collard, F., Bangjord, G., Herzke, D., & Gabrielsen, G. W. (2022). Plastic burdens in northern fulmars from Svalbard: Looking back 25 years. Marine Pollution Bulletin, 185, Article 114333.

Background on plastic pellets and other pre-production microplastics

PRE-PRODUCTION PLASTIC PELLETS ARE tiny, bead-like pieces of plastic, usually less than five millimeters in size, which makes them microplastics.[7] Once melted down, they serve as the base material for manufacturing a wide range of everyday items, including water bottles, plastic bags, and foam food containers.[8]

They commonly make their way into the environment during production, handling, and transportation, with many ending up in rivers, lakes, and oceans.[9] Some of these discharges are accidental, such as train derailments, while others are intentional, with some companies, particularly in the United States, are permitted to discharge directly into wastewater and waterways as required by the Clean Water Act.[10] Because they are intentionally manufactured at a small size, they are considered primary microplastics and are especially difficult to contain or recover once released. But a large majority of plastic pellet pollution is preventable.

In aquatic ecosystems, plastic pellets pose serious risks to wildlife. Fish, birds, and other animals often mistake them for food, leading to internal blockages, reduced nutrition, and exposure to toxic substances.[11] When predators consume prey that have ingested pellets, the plastics may move up the food chain through a process known as trophic transfer.[12]

Pre-production plastic pellets contain a range of chemical additives, including plasticizers, flame retardants, and UV stabilizers.[13] They can also act like sponges, absorbing pollutants from their surroundings such as dichlorodiphenyltrichloroethane (DDT), polychlorinated biphenyls (PCBs), and mercury, while simultaneously releasing their own harmful substances.[14] Research

[7] Pew *supra* note 3 at page 11.
[8] Karlsson *supra* note 2.
[9] *Id*.
[10] *Id*.

[11] Collard *supra* note 6; Carpenter EJ, Anderson SJ, Harvey GR, Miklas HP and Peck BB (1972) Polystyrene Spherules in Coastal Waters. *Science* 178: 749. doi: 10.1126/science.178.4062.749
[12] Subaramaniyam, U., Allimuthu, R. S., Vappu, S., Ramalingam, D., Balan, R., Paital, B., Panda, N., Rath, P. K., Ramalingam, N., & Sahoo, D. K. (2023). Effects of microplastics, pesticides and nano-materials on fish health, oxidative stress and antioxidant defense mechanism. Frontiers in Physiology, 14, Article 1217666.
[13] Law KL, Sobkowicz MJ, Shaver MP and Hahn ME (2024) Untangling the chemical complexity of plastics to improve life cycle outcomes. *Nature reviews Materials* 9: 657–667. doi: 10.1038/s41578-024-00705-x

[14] Rosenberg N (2026) What are Nurdles? The Tiny Plastic Pellets Threatening San Diego's Lagoons.; See also International Pellet Watch | Global Monitoring of POPs using Beached Plastic Resin Pellets. Available: http://pelletwatch.org/. Accessed June 17, 2026.

has found that when fish ingest microplastics, they may experience inflammation, immune system disruption, genetic damage, and other toxic effects.[15] These particles can also alter fish behavior, affecting how they swim and feed.[16] In species like sea urchins, even low levels of exposure have been linked to oxidative stress and problems with embryo development.[17]

Plastic pellets are a part of the growing microplastic problem. Microplastics have been found in the human body.[18] They can also absorb and carry harmful chemicals such as pesticides, heavy metals, and persistent organic pollutants from the surrounding environment.[19] When these contaminated plastics enter the food chain, particularly through seafood, there is potential for humans to ingest them as well.[20] In addition, plastics themselves may contain additives that are known carcinogens like plasticizers and stabilizers that can leach out and interfere with hormone function or contribute to other health issues.[21] The presence of plastic in the human body has serious consequences. A study published in the *New England Journal of Medicine* found that patients with microplastics in their carotid artery plaque had a 4.5 times higher risk of heart attack, stroke, or death over 34 months compared to those without.[22] Other studies have found that higher concentrations of plastic have been found in the brains of individuals with dementia.[23] Although research is still ongoing, scientists are increasingly concerned about the long-term effects of microplastic exposure, including inflammation, toxicity, and possible impacts on the endocrine and immune systems.[24]

As a part of the plastic production process, other forms of pollution are created and released into the environment, including plastic flakes, powders, and liquids.[25] The nature of these releases make them nearly impossible to clean up or collect.[26] This report focuses specifically on plastic pellets, as the uniform shape and size make them possible for volunteers to identify and

[15] Subaramaniyam, *supra* note 12.
[16] *Id*.
[17] Jimenez-Guri, E., Murano, C., Paganos, P., & Arnone, M. I. (2023). PVC pellet leachates affect adult immune system and embryonic development but not reproductive capacity in the sea urchin Paracentrotus lividus. Marine Pollution Bulletin, 196, 115604. Niccolai, E., Colzi, I., & Amedei, A. (2023). Adverse effects of micro- and nanoplastics on humans and the environment. International Journal of Molecular Sciences, 24(21), 15822.
[18] Savchuck K (2025) Microplastics and our health: What the science says. Available:https://med.stanford.edu/news/insights/2025/01/microplastics-in-body-polluted-tiny-plastic-fragments.html
[19] Borges-Ramírez MM, Escalona-Segura G, Huerta-Lwanga E, Iñigo-Elias E and Osten JR (2021) Organochlorine pesticides, polycyclic aromatic hydrocarbons, metals and metalloids in microplastics found in regurgitated pellets of black vulture from Campeche, Mexico. *Science of The Total Environment* 801: 149674. doi: 10.1016/j.scitotenv.2021.149674

[20] Subaramaniyam *supra* note 12.

[21] Law *supra* note 13.
[22] Marfella Raffaele, Prattichizzo Francesco, Sardu Celestino, *et al.* (2024) Microplastics and Nanoplastics in Atheromas and Cardiovascular Events. *New England Journal of Medicine* Massachusetts Medical Society.390: 900–910. doi: 10.1056/NEJMoa2309822

[23] Nihart AJ, Garcia MA, El Hayek E, *et al.* (2025) Bioaccumulation of microplastics in decedent human brains. *Nature Medicine* Nature Publishing Group.: 1–6. doi: 10.1038/s41591-024-03453-1

[24] Stanford *supra* note 18.
[25] Lamichhane G, Acharya A, Marahatha R, *et al.* (2023) Microplastics in environment: global concern, challenges, and controlling measures. *International Journal of Environmental Science and Technology* 20: 4673–4694. doi: 10.1007/s13762-022-04261-1

[26] *Id*.

collect by hand. Yet it is also essential to acknowledge the other forms of preproduction plastic pollution impacting communities, nature, and waterways.

International Plastic Pellet Count Methods and Results

VOLUNTEERS SURVEYED WATERWAYS for plastic pellets as part of the International Plastic Pellet Count. Standardized protocols required surveys in 10-minute intervals, with all data logged into Nurdle Patrol to calculate the total counts. By conducting a coordinated global count, we gain a better understanding of the extent of pre-production plastic pellet pollution and how it spreads over time. For more information on detailed methods, see the Appendix.

KEY FINDINGS INCLUDE:
1,073,433 pellets collected
249 sites surveyed
6 countries
31 U.S. states and Washington, D.C.
1,038 volunteers participated

By removing over a million plastic pellets from the environment in a single month, the International Plastic Pellet Count helped build awareness of plastic pellet pollution and engaged over a thousand volunteers in an ongoing citizen science effort. 136 (54%) counts found at least one pellet, which helps address existing data gaps. Plastic pellet pollution is often most concentrated near sites where pellets are manufactured, used, or transported. This pattern was confirmed by over 1,035,000 pellets collected near a plastic production facility along the Victoria Barge Canal in Texas.[27] Given that pellets were also found outside of the immediate range of these sites, our data demonstrate that plastic pellets are a widescale problem spreading throughout waterways around the world.

FINDINGS BY REGION

A. UNITED STATES
A total of 1,066,542 pre-production plastic pellets were logged across 31 states and Washington, D.C. Texas sites reported the highest counts by far, with 1,040,880 pellets, most of which were found along the Victoria Barge Canal.

See map on the following page.

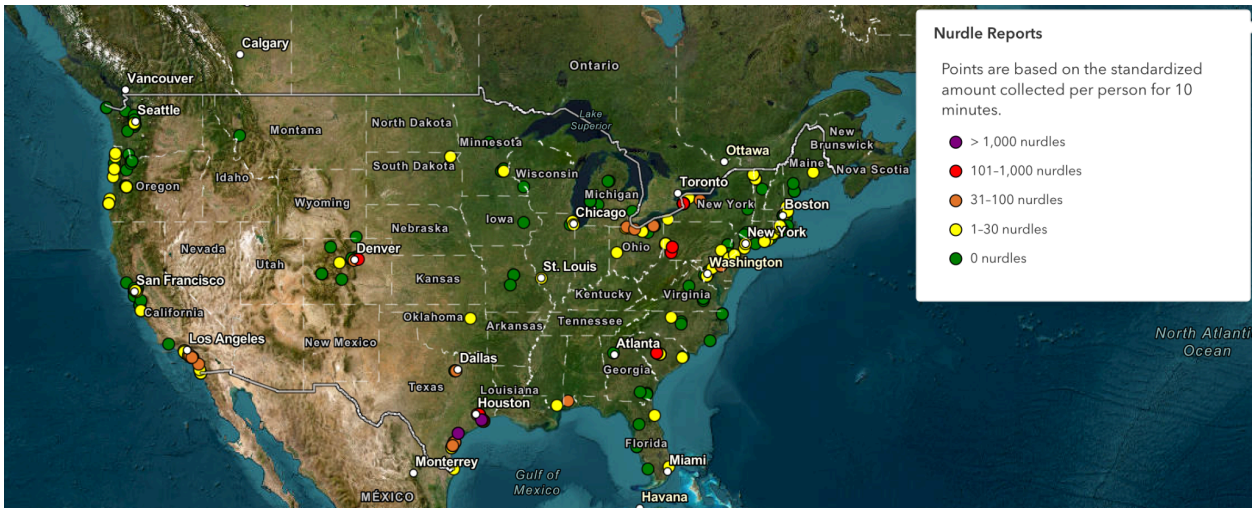
B. GLOBAL FINDINGS
Outside of the U.S., sites in Australia reported the highest number of pre-production plastic pellets with 6,485 pellets counted. These demonstrate that globally, governments must do more to stop pellet pollution from impacting waterways. International action is needed to prevent plastic pollution at its source.

See map on the following page

[27] Because the sample collected was so large, San Antonio Bay Estuarine Waterkeeper cleaned and weighed the sample, deducted the weight of the bucket holding the sample, and then multiplied the sample weight (32.5 lbs) by 22,000 (the number of pellets in a pound) and got the number of pellets as 715,000. Additional pellets found at this site were collected by other volunteers.

Map of plastic pellets found in May 2026 in the United States

Source: https://nurdlepatrol.org/en/map



Map of plastic pellets found in May 2026 globally

Source: https://nurdlepatrol.org/en/map

Policy Recommendations

WHILE THERE HAS BEEN SOME government action to address plastic pellet pollution, more must be done to successfully curb the spread of microplastics through our waterways and our world, given that current voluntary efforts have not stopped ongoing pellet spills and loss around the world. A range of policy solutions has already been proposed to address the issue, including key measures like preventing the loss of pellets in transportation and production which would greatly reduce plastic pellet pollution. In the U.S., legislation such as the Plastic Pellet Free Waters Act, which targets pollution from pre-production pellets, represents a possible path forward.[28] Internationally, the European Union enacted legislation to reduce pellet loss, while the United Nations is working toward a Global Plastics Treaty to tackle plastic pollution on a global scale.[29] Some states in the U.S. are also leading the way forward, such as Colorado, which in 2026 adopted a law making the discharge of plastic pellets explicitly illegal.[30]

This section highlights key policy approaches and provides advocacy tools that communities can use to drive meaningful action.

IN THE UNITED STATES

States take the lead

California was the first state in the U.S. to pass legislation addressing the handling of pre-production plastic pellets. Effective since 2008, California's Assembly Bill 258 requires the State Water Resources Control Board and Regional Water Quality Control Boards to develop and implement a program to prevent the discharge of pre-production plastics, including resin pellets and related materials, from both point and nonpoint sources.[31]

In March 2026, Colorado passed the Plastic Pellet-Free Waters Act.[32] The law prohibits the discharge of preproduction plastic pellets, flakes, fibers, and powders into state waters, stormwater runoff, or wastewater and prohibits the Colorado Department of Public Health and Environment from issuing permits allowing this type of discharge.[33] This is important as other states grant permits to companies to release plastic pollution directly into the environment, such as in Texas where 97% of the pellets from the Count were found. The Colorado law is scheduled to go into effect

[28] Durbin R (Mar 24, 2026) Plastic Pellet Free Waters Act. S.4181 https://www.congress.gov/bill/119th-congress/senate-bill/4181?hl=pellet&s=1&r=2

[29] UNEP Intergovernmental Negotiating Committee on Plastic Pollution. https://www.unep.org/inc-plastic-pollution

[30] Cutter L and Wallace K Prohibit Discharge Preproduction Plastic Materials. SB26-016 https://leg.colorado.gov/bills/SB26-016

[31] (Jan 1, 2008) Preproduction Plastic Debris Program. *California Water Code*. Section 13367, AB 258 https://www.waterboards.ca.gov/water_issues/programs/stormwater/plasticdebris.shtml

[32] Colorado *supra* note 30.

[33] *Id*.

in August 2027.[34] It is essential, however, as Colorado adopts this regulation that monitoring and enforcement are fully utilized to ensure there is no plastic discharge.

Additional proposals have emerged in states such as Virginia, Texas, South Carolina and Illinois, reflecting growing recognition of the issue.[35] While approaches vary, these efforts collectively signal increasing momentum across the United States to regulate pre-production plastic materials and prevent their release into the environment.

Efforts at the Federal Level

The Plastic Pellet Free Waters Act is one potential policy solution to address pre-production plastic pellet pollution. The measure would direct the U.S. Environmental Protection Agency (EPA) to issue a final rule that prohibits certain discharges of plastic pellets and other pre-production plastic into the nation's waters.[36] If adopted, this measure would offer clear and practical ways to protect communities and ecosystems from pre-production microplastic pollution.

In April 2026, EPA and the U.S. Department of Health and Human Services (HHS) announced a joint effort on microplastics.[37] EPA intends to add microplastics to its draft Contaminant Candidate List for drinking water, while HHS launched the Systematic Targeting of Microplastics program at the Advanced Research Projects Agency for Health.[38] While these moves signal growing federal recognition of a widespread and deeply concerning form of pollution, more must be done. However, in these regulatory discussions, U.S. federal officials failed to provide a plan to regulate or reduce this preventable pollution at the source.

There are viable pathways the federal government can pursue to address plastic pellets in a measurable and accountable way. EPA has authority under the Clean Water Act (CWA) to initiate rulemaking that would establish national discharge limits for pre-production plastic pellets and other pre-production plastics.[39] The agency also periodically publishes Effluent Guidelines Plans that set nationally applicable water

[34] *Id*.

[35] Clark (Jan 13, 2025) Discharge of preproduction plastic requirements. *Code of Virginia*. Section 62.1-44.6:2, HB2178 https://lis.virginia.gov/bill-details/20251/HB2178/text/HB2178; https://www.billtrack50.com/billdetail/1856924; (2021) SC Senate passes "nurdle bill" to help curb plastic pellet spills. Available: https://abcnews4.com/news/local/sc-senate-passes-nurdle-bill-to-help-curb-plastic-pellet-spills. Accessed June 17, 2026. https://abcnews4.com/news/local/sc-senate-passes-nurdle-bill-to-help-curb-plastic-pellet-spills Castilho GM (2026) Bill would give Illinois EPA greater oversight of manufacturers' plastic pellet runoff. In: *NPR Illinois*. Available: https://www.nprillinois.org/illinois/2026-04-21/bill-would-give-illinois-epa-greater-oversight-of-manufacturers-plastic-pellet-runoff. Accessed June 17, 2026. https://www.nprillinois.org/illinois/2026-04-21/bill-would-give-illinois-epa-greater-oversight-of-manufacturers-plastic-pellet-runoff

[36] *supra* note 28 (Pellet Act)

[37] US EPA (2026) EPA, HHS Announce Historic Actions to Protect Americans from Microplastics and Safeguard Drinking Water. Available: https://www.epa.gov/newsreleases/epa-hhs-announce-historic-actions-protect-americans-microplastics-and-safeguard. Accessed June 17, 2026. https://www.epa.gov/newsreleases/epa-hhs-announce-historic-actions-protect-americans-microplastics-and-safeguard

[38] *Id*.

[39] Clean Water Act, 33 U.S.C. §1251 et seq. (1972) https://www.epa.gov/laws-regulations/summary-clean-water-act

pollution standards for industrial and commercial facilities frameworks within which pellets could be explicitly incorporated.[40] Finally, while the EPA has announced its intention to expand its draft Contaminant Candidate List, microplastics should also be included in the Unregulated Contaminant Monitoring Rule (UCMR 6), which would require systematic monitoring in drinking water systems.[41]

GLOBAL ACTION

European Union (EU) Regulations

The EU adopted a legally binding regulation to address plastic pellet pollution across the supply chain in 2025.[42] The regulation aims to prevent the loss of pre-production plastic pellets during manufacturing, storage, handling, and transport.[43] It requires companies that handle pellets to implement strict risk management plans, improve packaging and handling practices, train staff, and take immediate action to contain and clean up pellet pollution.[44] Larger operators must obtain third-party certification, while all companies are subject to reporting and accountability requirements, including for accidental releases.[45] The regulation also introduces specific rules for maritime transport to prevent pellet pollution at sea and applies to both EU and non-EU companies operating within the EU market.[46]

While this is a significant step forward, certain exemptions may limit its effectiveness. Notably, companies handling fewer than 1,500 metric tons of pellets annually are excluded from many of the framework's requirements.[47] Addressing these loopholes is essential to ensure mitigation of pellet pollution across all sources.

Global Plastics Treaty

World leaders are continuing to engage in negotiations to finalize the Global Plastics Treaty.[48] A strong final treaty text could serve as a critical instrument for addressing plastic pollution on a global scale. It is necessary for world leaders to adopt a treaty that includes provisions to curb the spread of pre-production plastic pellets, including reduction at the source, ensuring transparent reporting, establishing binding rules across the plastic lifecycle, and providing funding for implementation.

International Maritime Organization

The United Nations is also working to address plastic pellet pollution through their specialized agency, the International Maritime Organization (IMO). In February 2026, the IMO adopted a draft updated strategy and action plan to tackle plastic

[40] US EPA (2014) Effluent Guidelines Plan. Available: https://www.epa.gov/eg/effluent-guidelines-plan. Accessed June 17, 2026. https://www.epa.gov/eg/effluent-guidelines-plan

[41] US EPA (2015) Learn About the Unregulated Contaminant Monitoring Rule. Available: https://www.epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule. Accessed June 17, 2026. https://www.epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule

[42] EDELÉNYI A and NIKOLOPOULOU M (Nov 12, 2025) on preventing plastic pellet losses to reduce microplastic pollution. REGULATION (EU) 2025/2365 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202502365

[43] *Id*.

[44] *Id*.

[45] *Id*.

[46] *Id*.

[47] *Id*.

[48] UNEP *supra* note 29.

pollution from ships, including fishing vessels, with the goal of achieving zero plastic pollution from ships by 2030.[49] This strategy includes new codes regulating the maritime transport of plastic pellets in freight containers, to stop spills.

[49] International Maritime Organization (Feb 19 2026) IMO sharpens plans to achieve zero plastic pollution from ships by 2030. Available: https://www.imo.org/en/mediacentre/pressbriefings/pages/imo-sharpens-plans-achieve-zero-plastic-pollution-from-ships-by-2030.aspx Accessed June 22, 2026.

Methodology

FOR INCLUSION IN THE International Plastic Pellet Count, participants from around the world logged their data into Nurdle Patrol. The website is a citizen science project run by the Harte Research Institute at Texas A&M University - Corpus Christi in Corpus Christi, Texas, and was started after a large number of plastic pellets washed up on Mustang and North Padre Islands in Texas in 2018.

Using the Nurdle Patrol methodology, data was collected by volunteers by hand in consistent 10-minute intervals along waterways. By adhering to Nurdle Patrol's established protocol, the resulting data is more reliable and allows for meaningful comparisons across different sites. The survey records both the total number of pellets collected and a standardized metric, calculated by dividing the total count by the number of 10-minute intervals and the number of volunteers. This produces a normalized value: the average number of pellets found per person per 10-minute count at a given location.

Events that happened at the same location on the same day were counted as one event and the data was combined. Events that happened in the same location on separate days are counted as separate events. "Same location" is defined as the same reported location name. If the location was ambiguous or no location name was reported, we looked at the reported geographical coordinates to three decimal places to identify events held at a single location on a single day. We excluded events where the location was unclear or where the reported number of pellets did not match other information reported about the event.

The findings in this report are based on self-reported data from partners and volunteers. The expertise and experience of the volunteers represent a wide range, from nonprofit professionals who have been finding pellets for years, to volunteers who had previously never seen a pellet. It is possible that there is variability in the participants' accurate identification of plastic pellets. Therefore, while the Nurdle Patrol and the data collected as a part of the International Plastic Pellet Count provide valuable insights into trends in plastic pellet pollution, it is not a complete picture of plastic pellet pollution. Plastic pellets are one type of plastic pollution impacting our environment and public health, and other plastic pollution is not reflected in this sample.

Data

Amount Collected	Standardized amount	Latitude	Longitude	# Volunteers	Collecting time	Country	State
6,348	706	-37.495944	144.916979	3	30	Australia	
137	46	-37.25226	145.627786	1	30	Australia	
1	1	7.083204	38.479566	2	10	Ethiopia	
400	34	35.929483	14.345122	2	60	Malta	
3	1	32.529403	-117.123937	4	10	Mexico	
1	1	32.528762	-117.123926	4	10	Mexico	
1	1	32.533131	-117.123516	4	40	Mexico	
0	0	-11.164426	-76.018363	1	30	Peru	
76	76	30.69079865	-88.03836024	1	10	United States	Alabama
0	0	38.315352	-123.031491	2	120	United States	California
0	0	37.483626	-122.453179	1	13	United States	California
0	0	37.8066	-122.42386	2	10	United States	California
0	0	37.963287	-122.420139	2	10	United States	California
0	0	37.942712	-122.411301	2	20	United States	California
84	9	37.88869431	-122.3162833	10	10	United States	California
35	18	37.862986	-122.305232	2	10	United States	California
0	0	37.862855	-122.299473	3	10	United States	California
23	6	37.763956	-122.273461	2	20	United States	California
0	0	38.025747	-122.13955	2	10	United States	California
0	0	36.9602286	-121.9894056	1	90	United States	California
1	1	36.601831	-121.888894	1	10	United States	California
0	0	37.244343	-121.8770634	2	10	United States	California
0	0	34.420867	-119.698342	1	15	United States	California
21	2	34	-118.5	1	180	United States	California
9	9	34.005264	-118.493356	1	10	United States	California
10	10	33.941364	-118.441615	1	10	United States	California
0	0	33.887299	-118.414394	2	15	United States	California
0	0	33.8847	-118.4109	2	15	United States	California
26	2	33.987657	-118.40021	1	180	United States	California
4,138	17	33.741957	-118.11453	21	120	United States	California
1,326	11	33.711583	-118.066015	31	40	United States	California
8,853	46	33.711204	-118.065772	43	45	United States	California
4	4	33.654466	-118.001651	1	10	United States	California
31	31	33.604404	-117.892249	1	10	United States	California

Amount Collected	Standardized amount	Latitude	Longitude	# Volunteers	Collecting time	Country	State
16	8	33.594872	-117.882781	2	10	United States	California
11	1	33.593153	-117.875412	9	30	United States	California
125	63	33.593193	-117.874609	2	10	United States	California
25	5	33.593117	-117.874079	2	30	United States	California
2	2	33.574076	-117.840589	1	10	United States	California
0	0	33.542537	-117.786942	1	20	United States	California
697	54	33.159417	-117.349775	13	10	United States	California
0	0	32.749123	-117.253186	1	60	United States	California
4	2	32.7688	-117.2512	1	20	United States	California
0	0	38.873729	-107.596837	2	30	United States	Colorado
0	0	40.483586	-106.83295	1	50	United States	Colorado
2	1	39.574965	-106.18792	2	60	United States	Colorado
0	0	38.536798	-105.989634	1	15	United States	Colorado
0	0	39.8040135	-105.2182483	1	10	United States	Colorado
0	0	39.8217275	-105.2140728	1	6	United States	Colorado
0	0	39.756697	-105.006406	2	10	United States	Colorado
120	60	39.689482	-104.997289	1	20	United States	Colorado
1	1	39.776976	-104.977211	24	60	United States	Colorado
0	0	39.7612237	-104.8770314	1	8	United States	Colorado
0	0	39.92308613	-104.8673426	2	20	United States	Colorado
0	0	41.130231	-104.827753	2	10	United States	Colorado
651	651	39.74786082	-104.708025	1	10	United States	Colorado
28	2	38.871585	-76.994006	8	20	United States	District of Columbia
25	2	38.871388	-76.992521	8	20	United States	District of Columbia
0	0	27.514546	-82.648778	1	30	United States	Florida
0	0	27.514546	-82.648778	1	30	United States	Florida
0	0	29.053324	-82.448637	1	15	United States	Florida
0	0	25.94800757	-81.74350011	1	10	United States	Florida
106	14	29.675286	-81.222831	8	10	United States	Florida
2	1	26.095278	-80.104919	1	30	United States	Florida
0	0	33.874862	-84.446538	7	120	United States	Georgia
0	0	31.298649	-82.392597	1	10	United States	Georgia
0	0	31.132685	-81.867812	1	10	United States	Georgia
0	0	31.21946	-81.866781	1	10	United States	Georgia
63	3	20.934952	-156.505406	5	60	United States	Hawaii
9	9	20.68414617	-156.4433306	1	10	United States	Hawaii

Amount Collected	Standardized amount	Latitude	Longitude	# Volunteers	Collecting time	Country	State
21	21	20.68211137	-156.4432892	1	10	United States	Hawaii
0	0	41.828021	-87.933234	1	30	United States	Illinois
3	1	42.048934	-87.672808	4	50	United States	Illinois
1	1	41.98256	-87.65696	1	42	United States	Illinois
36	18	41.859437	-87.633968	2	10	United States	Illinois
0	0	41.96528	-91.58073	2	50	United States	Iowa
0	0	44.239107	-70.184466	1	30	United States	Maine
0	0	43.801029	-70.116062	2	30	United States	Maine
4	4	44.869609	-68.672627	1	10	United States	Maine
0	0	39.02634	-77.02865	1	20	United States	Maryland
10	10	39.25547	-76.6214	1	10	United States	Maryland
191	118	39.365539	-75.970822	1	30	United States	Maryland
0	0	41.724432	-71.216088	1	20	United States	Massachusetts
0	0	41.4841032	-71.0365576	1	20	United States	Massachusetts
0	0	42.328735	-71.035536	12	10	United States	Massachusetts
0	0	42.546538	-70.862408	1	10	United States	Massachusetts
2	1	42.492437	-70.855166	2	20	United States	Massachusetts
0	0	42.243917	-70.765553	2	45	United States	Massachusetts
0	0	41.740906	-70.665919	1	20	United States	Massachusetts
254	5	42.6097	-70.6658	7	90	United States	Massachusetts
252	4	42.614611	-70.648422	7	100	United States	Massachusetts
0	0	43.167709	-86.298783	2	30	United States	Michigan
0	0	43.167064	-86.298531	2	30	United States	Michigan
0	0	42.975343	-85.662974	2	90	United States	Michigan
0	0	44.356003	-84.858825	1	20	United States	Michigan
0	0	44.342009	-84.792757	1	10	United States	Michigan
0	0	42.609866	-82.944092	1	13	United States	Michigan
0	0	46.493298	-94.314337	1	20	United States	Minnesota
0	0	44.908487	-93.30538	1	30	United States	Minnesota
0	0	44.905022	-93.192117	4	25	United States	Minnesota
18	18	44.893345	-93.168783	1	10	United States	Minnesota
0	0	45.016839	-93.154621	1	10	United States	Minnesota
0	0	44.051186	-91.617536	2	20	United States	Minnesota
19	19	30.39285546	-88.94505971	1	10	United States	Mississippi
0	0	38.199488	-92.618774	1	20	United States	Missouri
0	0	38.836473	-92.406238	1	10	United States	Missouri
0	0	38.815452	-92.383036	1	10	United States	Missouri

Amount Collected	Standardized amount	Latitude	Longitude	# Volunteers	Collecting time	Country	State
23	8	38.621973	-90.184273	1	30	United States	Missouri
0	0	46.844681	-114.067997	2	20	United States	Montana
7	1	42.905157	-70.791057	2	90	United States	New Hampshire
11	4	40.442787	-74.104761	3	10	United States	New Jersey
110	110	43.05528763	-78.90120425	1	10	United States	New York
79	79	43.05505887	-78.90084528	1	10	United States	New York
79	8	43.05456	-78.89959	10	10	United States	New York
132	132	43.053007	-78.898444	1	10	United States	New York
17	17	43.37143828	-78.46556653	1	10	United States	New York
51	51	43.241756	-77.574174	1	10	United States	New York
0	0	41.213772	-74.091797	1	60	United States	New York
0	0	40.736604	-73.995571	1	10	United States	New York
70	6	40.70418296	-73.99062619	8	15	United States	New York
0	0	40.751691	-73.988705	1	10	United States	New York
108	16	40.83477	-72.500262	2	40	United States	New York
0	0	41.388984	-73.90968	1	20	United States	New York
0	0	42.77	-73.87	2	10	United States	New York
1	1	40.929673	-72.231963	1	5	United States	New York
0	0	41.029756	-71.950221	2	10	United States	New York
450	382	43.05456	-78.89959	9	10	United States	New York
1513	1513	43.05456	-78.89959	1	10	United States	New York
427	17	43.05456	-78.89959	24	10	United States	New York
528	8	44.720442	-73.431797	23	30	United States	New York
4	1	36.174259	-79.87638	5	69	United States	North Carolina
0	0	35.776591	-79.145464	6	20	United States	North Carolina
0	0	35.884835	-79.070229	1	10	United States	North Carolina
0	0	34.696244	-76.787284	2	10	United States	North Carolina
0	0	36.38	-75.833	1	50	United States	North Carolina
0	0	36.389831	-75.827206	1	40	United States	North Carolina
26	3	40.149218	-84.226985	2	60	United States	Ohio
136	23	41.653658	-83.522705	1	60	United States	Ohio
188	32	41.686176	-83.379026	2	30	United States	Ohio
172	29	41.628528	-83.18802	2	30	United States	Ohio
467	39	41.557013	-82.802741	2	60	United States	Ohio
31	2	41.472682	-82.17238	5	45	United States	Ohio
0	0	41.348191	-81.725235	1	10	United States	Ohio
178	45	41.758974	-81.29007	1	40	United States	Ohio

Amount Collected	Standardized amount	Latitude	Longitude	# Volunteers	Collecting time	Country	State
678	85	41.761699	-81.282326	2	40	United States	Ohio
0	0	41.772655	-81.180201	1	20	United States	Ohio
100	3	36.103872	-95.815126	4	120	United States	Oklahoma
0	0	43.08419	-124.43506	2	60	United States	Oregon
80	16	43.098636	-124.432167	5	10	United States	Oregon
7	7	43.334	-124.373	1	10	United States	Oregon
103	3	44.608563	-124.070665	2	180	United States	Oregon
5	1	44.971637	-124.017561	5	10	United States	Oregon
65	6	45.00774334	-124.0087345	4	30	United States	Oregon
0	0	45.359498	-123.972318	4	10	United States	Oregon
0	0	45.762287	-123.967824	4	10	United States	Oregon
10	3	45.884543	-123.965068	4	10	United States	Oregon
6	2	45.695848	-123.940307	3	10	United States	Oregon
0	0	44.06565	-123.105357	10	20	United States	Oregon
0	0	44.054532	-123.083027	10	20	United States	Oregon
0	0	44.94269847	-123.0469243	1	10	United States	Oregon
0	0	44.04756	-123.043154	10	20	United States	Oregon
0	0	44.045745	-123.027107	1	10	United States	Oregon
0	0	44.045205	-123.026472	10	20	United States	Oregon
0	0	45.828514	-122.840242	11	30	United States	Oregon
0	0	45.457201	-122.704969	2	15	United States	Oregon
0	0	45.338943	-122.652253	5	15	United States	Oregon
0	0	45.446321	-122.64379	1	5	United States	Oregon
0	0	45.445538	-122.643361	1	5	United States	Oregon
1	1	44.052979	-123.081622	17	60	United States	Oregon
6	6	40.690194	-80.304161	1	10	United States	Pennsylvania
46	1	42.154034	-80.129918	18	60	United States	Pennsylvania
7	7	40.514122	-80.12013	1	10	United States	Pennsylvania
6	1	40.414667	-79.915443	8	15	United States	Pennsylvania
205	205	40.165181	-79.858321	1	10	United States	Pennsylvania
244	244	40.532663	-79.847445	1	1	United States	Pennsylvania
2	1	40.309028	-75.921457	5	10	United States	Pennsylvania
0	0	39.890837	-75.505704	30	30	United States	Pennsylvania
0	0	40.108577	-75.421945	1	20	United States	Pennsylvania
0	0	40.616233	-75.372846	2	10	United States	Pennsylvania
0	0	40.109188	-75.346454	2	20	United States	Pennsylvania
18	3	39.874907	-75.297726	3	20	United States	Pennsylvania

Amount Collected	Standardized amount	Latitude	Longitude	# Volunteers	Collecting time	Country	State
392	12	40.073791	-74.917489	17	20	United States	Pennsylvania
18	14	40.664218	-80.35758	7	10	United States	Pennsylvania
37	33	40.688857	-80.309793	7	10	United States	Pennsylvania
3	1	41.337035	-71.722156	4	10	United States	Rhode Island
0	0	41.38970964	-71.47214977	1	20	United States	Rhode Island
0	0	41.716426	-71.358789	4	10	United States	Rhode Island
6	2	41.717639	-71.358588	3	10	United States	Rhode Island
100	17	41.739892	-71.307994	1	60	United States	Rhode Island
0	0	41.6252	-71.21434	1	20	United States	Rhode Island
120	60	33.8017378	-80.8634885	2	10	United States	South Carolina
21	18	33.785018	-80.831778	1	12	United States	South Carolina
0	0	33.65267141	-78.9231909	1	20	United States	South Carolina
210	12.35	33.7615788	-80.7860655	17	10	United States	South Carolina
877	500	33.894826	-81.0396486	2	10	United States	South Carolina
2	1	45.68928291	-97.34226414	4	40	United States	South Dakota
0	0	48.33331171	-124.6622267	2	10	United States	Texas
10	7	32.706601	-97.394362	1	15	United States	Texas
18	9	27.42253	-97.298581	2	10	United States	Texas
27	14	27.425033	-97.297615	2	10	United States	Texas
7	4	27.426824	-97.29674	2	11	United States	Texas
38	38	27.586064	-97.218171	1	10	United States	Texas
48	48	27.605558	-97.207949	1	10	United States	Texas
19	10	27.632087	-97.194479	2	10	United States	Texas
32	3	25.995329	-97.149095	4	30	United States	Texas
36	36	27.803079	-97.076167	1	10	United States	Texas
5	5	27.81283	-97.06757	1	10	United States	Texas
46	46	27.821752	-97.059491	1	10	United States	Texas
0	0	32.72510477	-97.05052672	2	10	United States	Texas
23	2	27.83948561	-97.04518481	13	10	United States	Texas
350	50	32.71121641	-96.97735601	7	10	United States	Texas
320,000	320,000	28.46840793	-96.79181733	1	10	United States	Texas
715,000	715,000	28.4689	-96.7917	1	10	United States	Texas
1,390	52	29.72972343	-95.27807675	9	30	United States	Texas
551	184	29.76154	-95.07994	3	10	United States	Texas
486	11	29.5957894	-94.9877806	23	20	United States	Texas
1,200	1,200	29.389699	-94.885522	1	10	United States	Texas
27	27	29.272056	-94.815711	1	10	United States	Texas

Amount Collected	Standardized amount	Latitude	Longitude	# Volunteers	Collecting time	Country	State
217	10	29.274741	-94.810368	2	120	United States	Texas
126	5	29.289967	-94.787943	31	10	United States	Texas
230	11	29.289967	-94.787943	21	10	United States	Texas
312	8	29.289967	-94.787943	41	10	United States	Texas
1	1	29.33509628	-94.75311026	4	10	United States	Texas
1	1	29.335415	-94.7529	12	6	United States	Texas
356	18	27.63224	-97.193917	26	20	United States	Texas
324	324	29.386074	-94.874474	1	10	United States	Texas
33	11	44.492559	-73.24471	3	10	United States	Vermont
0	0	44.449971	-73.230678	1	15	United States	Vermont
0	0	43.927147	-72.664795	2	10	United States	Vermont
0	0	38.14372	-78.526623	1	10	United States	Virginia
0	0	37.5328551	-77.43766686	12	10	United States	Virginia
0	0	37.244227	-77.381204	1	15	United States	Virginia
0	0	37.37554896	-77.35882986	1	10	United States	Virginia
0	0	38.79603	-77.22167	1	10	United States	Virginia
0	0	38.772132	-77.053276	2	20	United States	Virginia
11	6	38.72429	-77.042151	2	10	United States	Virginia
0	0	48.3301045	-124.6597674	2	10	United States	Washington
0	0	48.150048	-123.161844	1	60	United States	Washington
0	0	47.087133	-122.974665	4	10	United States	Washington
0	0	47.5739	-122.4165	3	90	United States	Washington
0	0	47.320305	-122.414274	1	20	United States	Washington
0	0	47.678081	-122.405903	4	50	United States	Washington
0	0	47.694477	-122.404733	1	20	United States	Washington
0	0	47.691789	-122.404595	15	10	United States	Washington
0	0	47.691895	-122.403534	2	60	United States	Washington
50	4	47.540202	-122.39709	3	45	United States	Washington
50	4	47.540173	-122.397047	3	45	United States	Washington
0	0	47.909125	-122.395761	4	60	United States	Washington
0	0	47.477823	-122.36381	1	30	United States	Washington

End notes

Due to the lack of government monitoring, understanding the full scale of plastic pellet pollution would be challenging without the contributions of volunteers and community partners. Their involvement strengthens monitoring efforts, helps detect issues sooner, and demonstrates the scope of the problem. Taking part in the International Plastic Pellet Count not only generates important local data but also provides an opportunity for individuals to advocate for stronger global policies to address plastic pellet pollution.

Acknowledgements

International Plastic Pellet Count Steering Committee:
American Bird Conservancy, Environment America Research and Policy Center, Environmental Action, Nurdle Patrol, Oceana, The Surfrider Foundation, U.S. PIRG Education Fund, Waterkeeper Alliance, 5 Gyres

Event co-sponsors:
Alliance for the Great Lakes, Break Free From Plastic, Community Action Works, Earth Day Network, National Wildlife Federation, National Youth Leadership Council, Student PIRGs, Trout Unlimited, World Association of Girl Guides and Girl Scouts

Report reviewers: Fidra

Thank you to all the individuals who participated in the International Plastic Pellet Count as well as all the local groups who participated, including:

Amherst Steele High School Medical Health Tech Surfrider Club, Angelica Creek Watershed Association and Nolde Forest Environmental Education Center, Buffalo-Niagara Waterkeeper, California Public Interest Research Group, Capital Area Texas Master Naturalist, Congaree Riverkeeper, Conservation Law Foundation - Lake Champlain Lakekeeper, Cuyahoga County Department of Sustainability, Democratic Socialists of America- Tulsa Chapter, Environment America Research & Policy Center, Environment California Research & Policy Center, Environment Georgia Research & Policy Center, Environment Illinois Research & Policy Center, Environment Massachusetts Reserch & Policy Center, Environment Michigan Research & Policy Center, Environment Minnesota Research & Policy Center, Environment North Carolina Research & Policy Center, Environment Oregon Research & Policy Center, Environment Rhode Island Research & Policy Center, Environment Texas Research & Policy Center, Environment Washington Research & Policy Center, Environmental Action, Escape The Waste, Exeter Area General Federation of Women's Clubs, Fenceline Watch, Fordham University, Friends of Congaree Swamp, Fund for the Public Interest, Galveston Bay Foundation, Gannon University,

Harte Research Institute, HFG, Indivisible Environment Group, James River Association - James Riverkeeper, Sea Grant Lions Clubs International, Long Island South Shore Waterkeeper, Massachusetts Public Interest Research Group, Matanzas Riverkeeper, Media-Providence Friends School, Mission-Aransas National Estuarine Research Reserve, Missouri River Bird Observatory, No Strings Marionette Company, Oceana, Oregon State Public Interest Research Group, Peace Corps, Peconic Baykeeper, PennEnvironment Research & Policy Center, Plastic Free Cleveland, Port Phillip EcoCentre - Port Phillip Baykeeper, Presence Center for Applied Theatre Arts, Project Indigo, Proyecto Fronterizo - Tijuana Waterkeeper, RegenCycle, Rookery Bay Research Reserve, San Antonio Bay Estuarine Waterkeeper, Santa Monica College, San Diego Coastkeeper, Satilla Riverkeeper, Save RGV (Rio Grande Valley), Save the Bay - Narragansett Bay Riverkeeper, Save the Bay - Narragansett Baykeeper, SEA (Shoreline Education for Awareness), Seaside Sustainability, SHARKastics, ShoreRivers - Sassafras Riverkeeper, Spain SailGP Team, SPLASh (Stopping Plastics and Litter Along Shorelines), Surfrider Foundation, Surfrider Bogue Banks Chapter, Surfrider Charleston Chapter, Surfrider Eastern Long Island Chapter, Surfrider Galveston Chapter and Surfrider Ball High Club, Surfrider Grand Strand Chapter, Surfrider North Orange County Chapter, Surfrider San Diego Chapter, Surfrider Texas Coastal Bend Chapter, Texas Marine Mammal Stranding Network, The Cherokee Nation and the Galactic Federation, The Corporation for National and Community Service, Three Rivers Waterkeeper, Trash Free Maryland, Tualatin Riverkeepers, Turtle Island Restoration Network, TVT, Virginia Commonwealth University, WashPIRG Students, Willamette Riverkeeper, Western Resilience Center, Woman's Club of Danbury / New Fairfield INC. Connecticut

Looking for more resources or guides on permits and other tools to address plastic pellet pollution in your community? Reach out to Celeste Meiffren-Swango at celeste@environmentamerica.org; Chelsea McDonald at cmcdonald@waterkeeper.org; and Grace Vickers at gvickers@pirg.org to be connected.