

International Trash Trap Network: Visual Audit Protocol

Purpose: To obtain data on the count and categories of litter within your local area or waterway. This data can be used to inform the type of trash trap installed, and where to position trash trap technologies for the greatest cleanup efficacy by identifying hotspots of litter accumulation.

Materials:

- Paper Datasheet
- Pencil/Pen
- Site Map

Methods:

Before Site Visit:

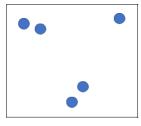
- 1. Prior to conducting a visual audit, identify multiple sites of interest to survey, e.g., sites where you think litter is known to accumulate in your local area or waterway, or sites where you think a trash trap may be successful. Complete at least one visual audit per site. Multiple audits per site are preferable to capture variability in litter accumulation across different days, weeks or seasons.
- 2. For each site, plan a route for the visual audit, e.g., along a specific section of riverbank, or shoreline.
- 3. Download a map of the chosen site, paste this image into the visual audit datasheet and mark the chosen visual audit route that you will follow.
- 4. Fill out a separate paper datasheet for each site and a separate datasheet for each repeat site visit.

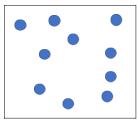
On site:

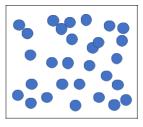
- 1. On the datasheet, fill in your name, date, site name, GPS coordinates for the site, weather, and waterfront conditions.
- 2. Begin walking along your chosen route, e.g., the perimeter of the site closest to the edge of the water.
- 3. To ensure standardized data collection, the visual audit should be done from a standing position. When looking for debris in the water, do not bend over. Walk upright and look down with your eyes. Bend down to see anything you are unsure of for closer inspection, but do not identify any other debris while bent down.
- 4. Identify the large debris items (debris larger than a bottle cap) floating at the surface of the water that you can confidently characterize. Record the item name and tally each of the items on your datasheet.
- 8. After surveying the entire site for large debris, note the amount of small debris. Use the four images below as a visual guide and mark the answer on your paper datasheet where it says: 'How much small anthropogenic debris (smaller than a bottle cap) is present at this site?'.











No small debris

Little amount

Moderate amount

Large amount

Following the Site Visit:

- 1. Input all data recorded on the paper datasheets into the Visual Audit Data Template.
- 2. How you analyze and interpret your data will be dependent on your objective:
 - a. If you are aiming to quantify and compare large debris, small debris, or both between sites.
 - b. If you are aiming to target a specific debris item for cleanup e.g., plastic bottles
 - c. If you are using the visual audit data to inform the type of device that you will choose

For example, if your objective is option 'a', the data can be analyzed by comparing the total count of large and small debris documented at each site. If multiple visual audits have been completed for each site, average the count of debris items across audits. The site(s) with the greatest amount of anthropogenic debris will be the optimal site(s) for trash trap installation.