

Neighborhood Source Area:  
Common Areas  
STORM DRAIN STENCILING



## STORM DRAIN STENCILING FACT SHEET 8

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**Description:** The ideal watershed behavior is to get residents to fully understand the connection between storm drains and downstream waters and avoid any activity that discharges pollutants. This awareness is most often created by stenciling storm drain inlets with a message, “Dump No Waste, Protect Our Waters ... For Life, e malama i ka wai ola” (Hawaiian). The negative watershed behavior is to use storm drains as a means of disposal for trash, yard waste and household products.

**How Storm Drain Marking Influences Water Quality:** Storm drain stenciling sends a clear message to keep trash and debris, leaf litter and organic matter out of the storm drain system. Stencils may also reduce residential spills and illicit discharge. Stenciling is also a direct and local way to increase watershed awareness and practice neighborhood stewardship. Stenciling is always a sign of good neighborhood housekeeping.

**Percentage of Residents Engaging in Storm Drain Stenciling:** This behavior does not require extensive resident participation; only trained adult volunteers are needed. Volunteers can include scouts, service groups, high school students, neighborhood associations, and other volunteers. Stenciling on a City street must be coordinated with the Adopt-A-Stream/Adopt-A-Block Coordinator.

**Factors to Consider in Storm Drain Stenciling:** The neighborhood storm drain system consists of sidewalk, curbs, gutters, streets, and storm drain inlets.

### Storm Drain Stenciling Guidance

1. Enlist one person to serve as the volunteer leader, and make sure he/she knows all the stenciling rules and safety procedures.
2. SAFETY FIRST! Review all safety procedures before stenciling.
3. When stenciling storm drains, do not stencil in the gutter, stay on the sidewalk at all times.
4. Do not mark any storm drains with vehicles parked nearby.
5. A responsible adult must watch for traffic and do nothing else.
6. The orientation of the stencil should face the pedestrian. Stenciling should be performed by at least two people, so one can be on the lookout for oncoming traffic. Safety traffic cones can be used to alert vehicles.

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7. Bring paper towels or a rag to wipe up and two trash bags – one for the wet stencil, which is not garbage, and one to pick-up garbage along the way.
8. Keep track of all storm drain stencils and turn this information over the team leader.
9. Record the locations of any storm drains that have leaves, grass clippings, oil, or other pollutants.
10. Properly dispose of all trash, including empty trash cans, at the end of the day, and return all empty unused supplies to the team leader.
11. Remember to wear old clothes and covered shoes.

### **Administration and Supervision for Volunteer Leader**

1. **IMPORTANT:** Please use the contact us form at <http://www.cleanwaterhonolulu.com/storm/contact/contact.html> to provide project volunteer leader names; total number of participating volunteers (volunteers must be at least 12 years of age, adult-child ratio is 5:1); start dates; start and end times; meeting locations; participating groups; requests for supplies, educational materials, and news release.
2. All volunteers must attend mandatory storm drain stenciling safety briefing and sign a release form before the cleanup. The release form is available online at [http://www.cleanwaterhonolulu.com/storm/learning\\_center/Final%20Clean%20Water%20He6C6F45.pdf](http://www.cleanwaterhonolulu.com/storm/learning_center/Final%20Clean%20Water%20He6C6F45.pdf).
3. Supplies are provided by the City's Adopt A Stream Program. Arrangement to pick up supplies must be confirmed by the City's Adopt-a-Stream/Adopt-A-Block Program Coordinator at least 2 weeks in advance due to secured access to the City's Corporation Yards. Designate volunteers to pick up supplies from the Kapolei Corporation Yard Administrative Offices or Honolulu Transfer Station Administrative Offices Monday-Friday, 10am-3pm, except holidays and furlough Fridays (1st and last Friday of each month). Recruit volunteers with pickup trucks to transfer supplies and trash bags from field sites to one designated base of operations. Each group's supplies include:
  - a. Catch basin map
  - b. One bucket to carry supplies
  - c. Stencil: 1 stencil for approximately 6 storm drains.
  - d. White spray paint cans: 1 can for approximately 6-8 storm drains.
    - i. Follow the instruction on the spray paint can. Be careful about exposure to fumes; use mask, safety goggle and gloves provided.
    - ii. Skip the storm drain if a car is parked nearby
    - iii. Paint pavement, not dirt. Sweep area. Wire bush area to be stenciled. Spray down wind of people
    - iv. Use too little paint rather than too much.
    - v. Lift stencil carefully to avoid smearing.

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- vi. Return all unused spray paint cans to your volunteer leader
  - e. One safety vest per group for adult; gloves and spray masks
  - f. Wire brush, whisk broom, and two plastic trash bags
4. Site Preparation:
- a. Report possible storm water illicit discharge violations to the City Storm Water Quality Branch at 768-3246 or 768-3247 for followup investigation at a later time.
  - b. Report hazardous materials and possible criminal activities to HPD, including graffiti, drugs, criminal littering and trespassing issues.
  - c. Report potential flooding issues, e.g. clogged storm drains, culverts, stream dividers, and streams to the City Road Maintenance Division at 768-7890.
  - d. Follow volunteer notification procedures in the event of bad weather.
    - i. Establish a cellular phone tree.
    - ii. Check the weather and stream conditions the night before and on day of the cleanup.
    - iii. Meet at the project location one half hour before and after start time to check weather and wet sidewalk conditions and notify drop in volunteers that the stenciling project has been cancelled.
    - iv. Adopt-A-Stream/Adopt-A-Block Coordinator will contact HPD to check project site for possible drop in volunteers in the event of a natural disaster, e.g. hurricane, tsunami warning. Never put yourself in a dangerous situation; stay out of the way of first responders and let them do their job.
    - v. Refer to <http://www.prh.noaa.gov/pr/hnl/> for weather conditions.
  - e. Try to arrive at least an hour before the cleanup, with some volunteers and cleanup leaders to help you set up.
  - f. Survey the site and try to spot any new safety concerns that may have cropped up. Do your best to explain any hazards you have identified to volunteers, before they begin the cleanup.
  - g. Establish an open area where volunteers will check in, sign release form, participate in safety briefing, and obtain supplies. Remember: Safety if key! Please return all unused tools and storm drain stenciling supplies one week after project completion.
  - h. Establish a base of operations near your volunteer check-in area. Consider these ideas for table stations to serve your volunteers:
    - i. **IMPORTANT: RELEASE FORMS**
    - ii. Water and other refreshments
    - iii. First aid and safety, e.g. first aid kit, sunscreen, bug spray, anti-bacterial wipes
    - iv. Catch basin map, trash bag, supplies.

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- v. Safety vests (storm drain stenciling)
  - vi. Educational materials, e.g. flyers, fact sheets, reports on stream and organization
  - vii. Media and volunteer sign-in sheets
5. Pre-Cleanup Safety Briefing
- a. Review safety issues and cleanup instructions; thank special guests, sponsors and volunteers. Plan a concise talk ahead of time; acknowledge the VIPs in attendance and also give them an opportunity to address the group.
  - b. Opening Remarks:
    - i. Briefly talk about the stream, neighborhood; its importance to the community, and the vital work of the volunteers to protect it.
    - ii. Acknowledge and thank the VIPs, sponsors, land owners, public agencies, organizations, and volunteers for their support and participation.
    - iii. Provide details about your neighborhood stream, including the name, length, distinguishing features.
    - iv. Help people visualize the bigger picture by show a map of the stream.
  - c. **Safety Issues:**
    - i. Think safety first! All volunteers must sign a City release form. The release form is available online at [http://www.cleanwaterhonolulu.com/storm/learning\\_center/Final%20Clean%20Water%20He6C6F45.pdf](http://www.cleanwaterhonolulu.com/storm/learning_center/Final%20Clean%20Water%20He6C6F45.pdf).
    - ii. Introduce cleanup leaders; organize teams. On the average, each team of 3 to 5 students and one adult can paint approximately 6-8 stencils an hour.
    - iii. Anyone needing to leave early, should inform you before they depart.
    - iv. Know the limits of your group.
      - v. Encourage volunteers to wear work gloves and dress to get dirty.
    - vi. Designate a responsible adult in each group who must watch for traffic and prevent overspray and do nothing else; this person will wear safety vest.
    - vii. Cross streets with adult leader. For safety reasons, do not allow stenciling on busy streets or high volume streets (e.g., Kapiolani Boulevard). Placards are better for those streets.
    - viii. Do not spray paint when there are cars parked nearby.
    - ix. For safety reasons, all stenciling work should be done on the sidewalks area.

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- x. Encourage volunteers to wear covered shoes, long pants are strongly recommended.
  - xi. Scout your neighborhood beforehand.
  - xii. If heavy rain is forecasted, consider canceling the project.
  - xiii. Use common sense; if it sounds, looks or smells dangerous, it could be. Stay safe.
  - xiv. Avoid hazardous materials, e.g. needles and other biohazard waste, broken glass, 55 gallon drums with mystery liquids.
  - xv. Safety tools: Simple safety gear and clothing choices include gloves, covered shoes, protective eye-wear, painting masks, sunscreen, and hand sanitizer.
6. Conclude Cleanup
- a. Account for all volunteers
  - b. Separate non-recyclables and recyclable such as plastic, aluminum, glass, metals, wood, and rubble.
  - c. Dispose of trash bags and empty spray paint cans in trash.
  - d. Report possible violations to the City Storm Water Quality Branch at 768-3246 or 768-3247 for followup investigation at a later time.
  - e. Report hazardous materials and possible criminal activities to HPD, including graffiti, drugs, criminal littering and trespassing issues.
  - f. Submit bulky item hotspot list to the Division of Refuse at [dshiraishi@honolulu.gov](mailto:dshiraishi@honolulu.gov).
  - g. Report potential flooding issues, e.g. clogged storm drains, culverts, stream dividers, and streams to the City Road Maintenance Division at 768-7890.
  - h. Distribute educational materials, including neighborhood pollution solution brochure. Brochure available online at [http://www.cleanwaterhonolulu.com/storm/learning\\_center/Final%20Clean%20Water%20He6C7060.pdf](http://www.cleanwaterhonolulu.com/storm/learning_center/Final%20Clean%20Water%20He6C7060.pdf) and [http://www.cleanwaterhonolulu.com/storm/learning\\_center/Final%20Clean%20Water%20He6C6F45.pdf](http://www.cleanwaterhonolulu.com/storm/learning_center/Final%20Clean%20Water%20He6C6F45.pdf). Explain that runoff in storm drains pick up pollutants that flows to the ocean. List activities people can do to prevent pollution from going into storm drains. Classroom education is enriched through dialogue with storm water experts, school-to-school networking, and online publication of creative work by students. These projects model inquiry-based approach to teaching and learning.
  - i. Outcome: As a result of storm drain stenciling project:
    - i. Communities are educated about the dangers of dumping pollutants into the streets, storm drains and downstream waters.
    - ii. Students are educated and empowered to do more to help cleanup their communities.

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7. **IMPORTANT:** Complete online field data form for reporting purposes at [http://www.cleanwaterhonolulu.com/storm/hero/stream\\_data\\_sheet.html](http://www.cleanwaterhonolulu.com/storm/hero/stream_data_sheet.html). Record your results to measure the positive impacts you make!
8. **IMPORTANT:** Submit photos to Storm Water Community Relations at [iwalanis5@gmail.com](mailto:iwalanis5@gmail.com).
9. Consider creating a summary that can be emailed to participants. Include the number of people that helped, sponsors and supporters of your cleanup, trash totals and photos of everyone hard at work; establish a link to [www.cleanwaterhonolulu.com](http://www.cleanwaterhonolulu.com). People will feel proud of the results, and will be excited about your next cleanup.
10. Priority TMDL watersheds are Kaneohe and Kawa (Kaneohe), Kapaa (Kailua), Kahawai (Waimanalo) Ala Wai (Palolo, Manoa, Makiki), Kapakahi (Waikele-Waipahu-Pearl Harbor) and Kaukunahua (Central Oahu).

References: City and County of Honolulu Storm Water Management Program and Center for Watershed Protection.

Point of Contact is Iwalani Sato, Storm Water Quality Community Relations Specialist at [isato@honolulu.gov](mailto:isato@honolulu.gov).

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