

# Illegal Dumping Prevention Guide



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# Introduction

Illegal dumping is a serious problem in many U.S. communities. It can threaten public health, safety, property values, and quality of life. This guidebook aims to provide tailored prevention strategies that address the unique factors contributing to illegal dumping. It describes effective practices and real-world case studies that showcase successful prevention strategies.

The U.S. Environmental Protection Agency (EPA) designed this guidebook for various users, including Tribal, state, county, and local government authorities; community groups; civic organizations; industry representatives; utilities; and infrastructure companies such as transportation and pipeline services providers.

The information in this guide is based on EPA's 1998 Illegal Dumping Prevention Guidebook (U.S. EPA, 1998), which used studies conducted in the upper Midwest—neighborhood tours, interviews with local officials and community members, and a review of successful prevention programs. In 2025, the guide was updated with supplementary information on prevention programs from across the United States, again with a focus on upper-Midwest localities.



*Crews working for Snohomish County, Washington's Solid Waste Environmental Cleanup Team removed more than 390 tires illegally dumped on county-owned property.*

## Understanding Illegal Dumping

Illegal dumping happens when people dispose of waste in unauthorized locations. It's commonly referred to as "open dumping," "fly dumping," or "midnight dumping" because it often occurs in open areas, from vehicles on roadsides, or late at night. Typically, the waste involved with illegal dumping is nonhazardous, and offenders most likely do it to avoid disposal fees or because collection or proper disposal services are not readily accessible. Occasionally, potentially hazardous or industrial materials, such as drums with unidentified chemicals, may also be illegally dumped for similar reasons.

The most common materials that offenders illegally dump include:

- **Construction debris:** Drywall, roofing shingles, lumber, bricks, concrete, and siding
- **Furniture:** Mattresses, sofas, tables, and dressers
- **Household appliances:** Refrigerators, dishwashers, air conditioners, and clothes washing and/or drying machines
- **Auto-related items:** Cars, auto parts from engines and transmissions, batteries, used oil, other automotive fluids, and scrap tires
- **Medical waste:** Hypodermic needles, blades, used bandages or gloves, and expired or unused medications
- **Yard waste:** Tree branches and piles of leaves
- **Household hazardous waste:** Products such as paints, cleaners, oils, batteries, and pesticides

If not addressed, an illegal dump site can embolden others to dump their waste in the same place and perpetuate the cycle of illegal dumping in a community.

## Background: The Problem of Illegal Dumping

Illegal dumping presents a significant challenge for communities, with various individuals and groups contributing to the problem. This section examines how to identify offenders, their motivations, and the patterns that often accompany illegal dumping. It also explores contributing factors like economic barriers and inadequate waste management services, highlighting the broader environmental and societal impacts of illegal dumping.

# Who Engages in Illegal Dumping?

## Identifying Illegal Dumpers

Illegal dumpers don't fit into one type. They can include:

- Construction, demolition, remodeling, roofing, or landscaping contractors
- Residents, particularly rural residents, who are not offered regular municipal services and cannot pay for private services or take materials to solid waste management facilities
- Illegitimate waste management companies or general hauling contractors
- Operators of transfer stations or junkyards
- Automobile repair or tire shop employees
- Scrap collectors

**Scrap tires.** Scrap tires are often dumped illegally. A tire's physical structure, durability, and heat-retaining characteristics make illegally dumped tires a potential threat to human health and the environment. While there are secondary markets for scrap tires and a robust infrastructure to properly manage them, unprofitable scrap tires are often dumped to avoid disposal costs. Some state agencies, like the Ohio EPA, charge consumers small fees on tire purchases to fund statewide [scrap tire remediation programs](#).

## Patterns

Though illegal dumping can occur at any time, some municipal officials have noted patterns, which include:

- **Nighttime:** Illegal dumping commonly occurs at night due to the reduced visibility and lower likelihood of being spotted.
- **Moving and evictions:** Tenants moving in and out of housing, such as at college campuses, can cause an increase in illegal dumping. Following an eviction, landlords may remove a tenant's property by dumping it in the community.
- **Seasonal patterns:**
  - *Post-holidays:* People often have extra trash from gifts, packaging, and decorations following holiday seasons.
  - *Tourism and transient populations:* Populations passing through communities or living there temporarily may not consistently receive waste management services.
  - *Warmer months:* While illegal dumping may happen throughout the year, people may be more likely to notice and report illegal dumping after snow melts or when spending more time outdoors.

## Motives

Businesses running unpermitted transfer stations or recycling operations that are then abandoned might dump waste illegally; so might demolition contractors avoiding disposal costs by illegally dumping their waste at either vacant or rural locations.

Offenders might also be residents who illegally dump waste that waste haulers or facilities do not regularly accept for recycling or disposal. These materials may include bulky or hard-to-dispose-of items such as furniture, tires, carpeting, or hazardous waste.

# The Impact of Illegal Dumping

## Property and Environmental Impacts

- **Fires** can happen when illegally dumped waste spontaneously combusts—or is burned in an act of arson—and the fire spreads to neighboring residential areas and structures. Illegal dumping is often associated with open burning sites. Fires at these sites can lead to larger wildfires or brush fires that destroy undergrowth, causing erosion and putting people and their property at risk. Because tires are prone to heat retention, abandoned scrap tire piles are easily ignitable. These fires are particularly difficult to extinguish and can burn for months, generating unhealthy smoke and toxic oils.
- **Flooding** can occur when ravines, creeks, culverts, and drainage basins become clogged with dumped waste.
- **Contamination** of wells and surface water used for drinking water can happen when hazardous chemicals and materials run off from dump sites. Runoff from tire piles can contain thousands of known and potentially toxic compounds (Mayer et al., 2024). As well as having impacts on human health, runoff from illegal dumping can harm aquatic ecosystems.

## Health Impacts

- Illegal dumping sites may increase the likelihood of residents' **exposure to hazardous materials** such as asbestos-containing materials, sharp materials, rusty nails, and hazardous chemicals.
- Tires provide ideal conditions for stagnant, non-draining water to pool and increase the **breeding of disease-carrying mosquitoes**. Mosquitoes carrying severe illnesses, such as encephalitis, dengue fever, and West Nile virus can breed in these scrap tire piles (LaDeau et al., 2013). The frequency of these diseases in the United States may increase as temperatures and rainfall increase due to climate change (Beard et al., 2016). Under these conditions, certain communities affected by scrap tire dumping may be more susceptible to these diseases.
- Food waste and miscellaneous materials in illegal dump sites can attract **wild animals and disease-carrying vermin such as roaches and rats**.
- Communities with dump sites can experience significant **strain on their mental health** such as stress, depression, and anxiety (South et al., 2018). Researchers at the University of Michigan are studying the potential connection between illegal dumping, vacant land, and community violence in Flint, Michigan (Michigan Youth Violence Prevention Center, n.d.).

## Economic Impacts

Property values near illegal dump sites sometimes decline, inhibiting development or redevelopment. Illegal dumping can create a cycle where the lack of property development leads to a decrease in tax revenues needed to support illegal dumping prevention programs, increasing the potential for illegal dump sites. The areas susceptible to illegal dumping (e.g., vacant lots, rural locations, abandoned buildings, previous illegal dump sites) multiply and the cycle continues. These susceptible areas may be owned by absentee owners or, in some cases, by local government authorities due to property tax foreclosure.

The costs associated with continuous cleaning and maintenance of common dump sites can significantly impact local governments. Communities spend money removing waste by hauling and disposing of the materials that were illegally dumped. A study across nine Pennsylvanian cities estimated that over \$68.5 million was spent on their illegal dumping programs, which included education, abatement, and enforcement (Burns McDonnell, 2020). These costs likely divert resources away from other government services and, in the long term, lead to increased property taxes.

### Common illegal dumping areas:

- Vacant lots
- Abandoned buildings
- Unused factories
- Remote areas
- Poorly lit roads
- Railways
- Highways
- Alleys
- Charity drop-off boxes
- Construction sites
- Forests
- Public areas with waste containers

## Key Contributing Factors

### Demographic Influences

Communities facing illegal dumping might lack convenient, affordable ways to dispose of waste or recycle materials. This may be because:

- Residents struggle to pay for trash pickup and disposal fees. The problem may be worse in areas with renters who might not feel connected to the community or property owners who do not prioritize the issue or are absent.
- Residents lack education on local waste management laws and do not know how harmful dumping can be to the environment.
- Residents have no way to haul waste to a transfer station or landfill.

### Physical Conditions

Illegal dumping often happens in unsecured locations, away from the public eye, that may have poor or inadequate lighting or be unmonitored. Offenders may choose spaces that appear inconspicuous to the public or where there is less of a chance of getting caught (Hohl et al., 2023). Offenders often target locations near junkyards, landfills, or construction sites. Once dumping starts in an area, it often attracts more dumping. Natural disasters like floods may generate large amounts of debris and damaged items,

resulting in more illegal dumping. EPA's *Planning for Natural Disaster Debris* provides guidance to communities preparing for managing debris generated by natural disasters, including pre-incident planning, source reduction, and hazard mitigation activities (U.S. EPA, 2019).

## Inadequate Waste Management Infrastructure

Some jurisdictions prohibit landfilling waste such as yard waste, scrap tires, appliances with freon, car batteries, used oil, and other automotive fluids. In communities without consistent, affordable trash and recycling pickup services, wastes like these are often more likely to be dumped illegally. High disposal fees, inconvenient locations, minimum tipping fees, or strict guidelines at landfills and transfer stations can also lead to illegal dumping.

In some cases, local governments lack the resources to offer affordable disposal options to residents. In other cases, infrastructure for managing certain waste types might be available, but there might be a lack of education and outreach. If the information about available options isn't widely known, understood, or accessible to the community, illegal dumping may still occur.

EPA Pay-As-You-Throw: Lessons Learned About Unit Pricing of Municipal Solid Waste study shows that communities implementing "pay-as-you-throw" (PAYT) or unit-based disposal programs typically do not have ongoing illegal dumping issues (U.S. EPA, 1994). In the 2006 follow-up on PAYT, the authors state that illegal dumping following implementation of PAYT programs is "a bigger fear than reality... a problem in about 20% of communities—a problem that lasts about 3 months or less" (Skumatz & Freeman, 2006). Though an initial spike in dumping might occur when new programs start, the problem usually decreases as residents learn the system. Continuous education is key to preventing illegal dumping.

[Aurora, Illinois: Pay-As-You-Throw program.](#) In Aurora's PAYT program, monthly disposal fees depend on how much garbage residents throw away. Residents can choose from various garbage carts, and they're charged based on the size of the carts. They can also buy stickers to place on any additional bags, cans, or appliances they put on the curb. This incentivizes households to minimize their waste and increase recycling while preventing illegal dumping.

## Cultural and Linguistic Barriers

Some communities may experience a combination of economic hardships, lack of accessible waste disposal options, and cultural or language barriers that make it difficult to understand or engage with local waste management programs. For example, non-English-speaking residents may not be able to get important information about appropriate disposal methods or opportunities for disposal (bulky waste pickup, community household waste collection events, etc.). Additionally, cultural norms and limited community engagement may result in less participation in recycling programs or less emphasis on waste management education. Successful illegal dumping prevention programs must consider these unique barriers and provide culturally relevant outreach, multilingual resources, and disposal options that are affordable and convenient.



# Community Strategies for Preventing and Managing Illegal Dumping

Successful illegal dumping prevention programs are built on a foundation of:

- Accessible options for waste disposal and sustainable materials management
- Informative, accessible, and broad outreach and education programs that address driving forces of illegal dumping like user fees, curbside pickup restrictions, lack of education or outreach, and ineffective recycling programs
- Strong support from local leaders
- Collaboration between authorities, communities, and industries
- Site management and maintenance
- Tracking metrics for improvement, accountability, and publicity



*Construction and demolition debris illegally dumped in St. Louis, Missouri.*

The next few sections of this guide describe strategies based on these elements, along with case studies that highlight successful efforts to combat illegal dumping.

## Accessible Options for Waste Disposal and Sustainable Materials Management

Illegal dumping can be prevented by ensuring that proper and affordable waste management and recycling options are available to as many individuals and businesses as possible. This may include providing grants or other forms of assistance to low-income populations or municipalities. Offering help complying with waste regulations to businesses and others may also help prevent illegal dumping. Communities sometimes rely on compliance assistance and outreach before any enforcement actions to best deal with offenders on a more personal level.

### Case Study: [Minneapolis, Minnesota](#)

Convenient access to low- or no-cost options for proper waste disposal is believed to be a deterrent to illegal dumping. [EPA's Solid Waste Infrastructure for Recycling \(SWIFR\)](#) grant was awarded to the city in 2024 to revitalize the city's North Transfer Station. This transfer station will expand citizen access to residential drop-off and recycling services. It is in an area of the city that faces significant impacts from illegal dumping.

### Case Study: [Wayne County, Michigan](#)

Wayne County developed a [voucher program](#) to offer citizens recycling opportunities to prevent illegal dumping of household hazardous waste in their community. Residents can use the voucher to recycle paint, electronics, chemicals, and other household hazardous waste Monday through Friday at a local collection site run by a contractor. This popular voucher program gives citizens increased access to recycling opportunities for these difficult-to-manage items beyond regular household hazardous waste events. Wayne County also offers a mobile app, "Wayne County Recycles," to help with recycling and disposal of common household materials. The app and the [searchable guide](#) on the county's website include hard-to-manage materials and help citizens identify local facilities that will take these materials.

## Informative, Accessible, and Broad Outreach and Education Programs

Community events and cleanups engage residents and inspire them to refrain from and prevent illegal dumping in their communities. Drop-off events promote responsible disposal and recycling of specific waste products such as tires. Implementing targeted programs can increase education and collaboration within a community.

### Case Study: [Bernalillo County, New Mexico](#)

The Illegal Dumping Partnership (IDP) is a multiagency task force founded to help combat illegal dumping throughout the Bernalillo County region, including Albuquerque. The IDP engages a wide variety of partners in the region including water, transportation, law enforcement, education agencies, and nonprofits. The IDP's comprehensive outreach website, [ihavetrash.com](http://ihavetrash.com), explains how to report illegal dumping, where to recycle materials, and where to find drop-off locations for hard-to-dispose-of materials. The partnership also has a collection of outreach materials available for students called "Clean Up with Carlos and Friends." The outreach materials and websites created by the IDP are available in both English and Spanish.

### Case Study: [Monroe County, Indiana](#)

The Monroe County Waste Reduction District educates the public on proper waste disposal and resources available through methods such as advertising on radio stations, engaging with the community at county fairs, and implementing programs in county schools. The county observed that increased education and awareness led roadside dumping sites to be reported more often to the Waste Reduction District by community members.

### Case Study: [State of Illinois](#)

The Illinois Environmental Protection Agency partnered with Recycle Coach to provide all Illinois residents in the 6,835 units of local government a holistic, locally tailored, easy-to-access recycling education platform. Citizens across the state, such as in the city of [Chicago](#), can use the app and online platform to learn about collection and other waste management events, stay informed about service changes for municipal waste and recycling pickup, and access a comprehensive database detailing what is and isn't recyclable, including local disposal information for common and uncommon items.

### Case Study: [State of Michigan](#)

The Michigan Department of Environment, Great Lakes, and Energy oversees [Michigan's Scrap Tire Program](#), which is responsible for managing scrap tire disposal, cleaning up existing piles of 500 or more tires, and encouraging the reuse and recycling of tires. Scrap tire transporters and collection sites must register annually. Program staff regularly inspect scrap tire collection sites, processors, end-users, and generators, which include tire dealers and auto scrap yards.

## Strong Support from Local Leaders

Local elected officials and municipal or county staff should prioritize providing enough funding, equipment, and labor for illegal dumping prevention programs. As well, staff should use available resources and keep elected officials and the public updated on their progress.

Local laws and state regulations can establish measures to mitigate illegal dumping, but strong enforcement from government leaders and others is essential. For example, law and code enforcement officers need support from their leadership and the judicial system must also uphold these efforts. If authorities do not treat illegal dumping as a serious issue, residents may become discouraged and stop reporting it. This allows the cycle of illegal dumping to continue or worsen.

## Crafting and Enforcing Ordinances

Effective enforcement depends on ordinances that regulate waste management and prevent illegal dumping. These ordinances may require permits for waste-generating activities, prohibit open burning and dumping, or mandate waste pickup for rental properties. They may set penalties such as:

- Fines
- Incarceration
- Vehicle impoundment
- Cleanup cost recovery
- Property or utility liens
- License revocation
- Community service



Using penalties creatively can enhance prevention. For example, fines can fund programs or support citizen rewards, while community service can focus on cleanup efforts.

Ordinances should be reviewed periodically to keep them up to date.

## Building a Robust Enforcement and Prosecution Framework

Dedicated enforcement and prosecution personnel play an important role in preventing illegal dumping. High-level authorities can show support for illegal dumping enforcement by assigning specific officers who know the relevant laws and have the authority to issue citations, make arrests, and conduct surveillance. Off-duty officers can assist during peak dumping seasons, such as warm months. When officers investigate illegal dumping, they might also uncover other crimes.

Other government agencies, like health or environmental departments, can allocate personnel to illegal dumping cases, but they need direct access to law enforcement for effective support. This requires clear communication and a commitment from law enforcement to provide timely backup.



*Abandoned mattress in a field in Salton Sea, California.*

## Enhancing Field Operations and Response

Field operations call for officers who are properly trained and have the right authority, equipment, information from the community, and surveillance strategies.

### Training

Code and law enforcement officers must understand relevant illegal dumping prevention laws and ordinances. A training program for officers could involve:

- Including environmental topics in academy training
- Showing short videos during roll call
- Providing training materials such as pocket cards with key ordinances, sample tickets, and manuals

Several organizations offer support for developing training programs:

- [EPA's National Enforcement Training Institute](#)
- [Regional Environmental Enforcement Associations](#)
- [Southern Environmental Enforcement Network](#)
- [Northeast Environmental Enforcement Project](#)

### Authority

Officials must have the authority to conduct surveillance, inspections, and investigations into illegal dumping. Overlapping responsibilities among Tribal, state, local, and federal officials can create confusion about accountability. Clearly defined jurisdictions help avoid duplication and enable more effective use of limited resources. Where illegal dumping crosses boundaries and jurisdictions, cooperative agreements or similar formal agreements may make it easier to recognize shared goals. This may be

especially useful in and around Tribal lands experiencing illegal dumping. Some have used joint citations to more effectively and consistently oversee the enforcement process. Sometimes, local agencies lack the resources to respond effectively, even if they are primarily responsible. If authority is delegated, a written agreement should clarify roles and responsibilities. Stakeholders must maintain continuous communication and coordination.

## Equipment

Local, county, and state code enforcement officials or investigation units can source equipment to prevent illegal dumping. Older equipment may be available at a lower cost or can be borrowed if agencies upgrade their gear. Equipment used for effective field operations includes:

- Radios or cell phones
- Spotlights or night-vision gear
- Cameras (instant film, 35 mm, digital still and video cameras, trail cameras, license plate reader cameras where allowed) and accessories like mobile photo printers
- Night-vision and other low-light video equipment
- Notebooks or tape recorders
- Citation books
- Checklists of laws and ordinances

## Community Resources

The community can serve as a resource for enforcement if given the right tools. For example:

- Mobile phone applications can enable citizens to identify and report illegal dumping, yielding data for enforcement.
- Question lists for 311 or other non-emergency city service employees can help them gather useful information when taking illegal dumping complaints.

## Surveillance

Effective methods to identify and prosecute people engaged in illegal dumping include:

- Stakeouts
- Video monitoring
- Patrols
- Community involvement
- Examination of dumped material for labels, addresses, or other evidence of its source

Using unmarked vehicles and night-vision gear at stakeouts works best during peak dumping hours. High-risk areas should be patrolled to catch illegal dumpers in the act. Video monitoring can be cost-effective but requires consideration of equipment and maintenance costs. Video evidence should be verified to ensure it is admissible in court before implementation.

Community members can report suspicious activity and provide vehicle descriptions. Local property owners can use their properties for stakeouts or camera setups. A hotline and reward system for tips encourage participation from the community.

### Case Study: [Bexar County, Texas](#)

The county's Environmental Services Department has implemented a robust surveillance strategy, employing both visible and discreet cameras at known dumping hotspots. These efforts have led to the successful identification and arrest of offenders, including recent cases captured on surveillance video. For example, a video recorded a man adding a couch to a dumping pile, resulting in a warrant for his arrest. Investigators place cameras in public areas and get permission for installations on private property. Through this proactive approach, the county has caught several offenders involved in illegal dumping incidents, highlighting the effectiveness of surveillance in enforcing environmental regulations (Brnger, 2022).

### Case Study: [Franklin County, Ohio](#)

The Franklin County Municipal Court Environmental Division, created by the Ohio General Assembly in 1991, hears various cases related to the quality of life for residents in Columbus and Franklin County, Ohio. This includes cases about investigations into littering and illegal dumping violations brought by city of Columbus refuse inspectors, the Franklin County Sheriff's Office Environmental Crimes Unit, and local law enforcement agencies. Residents can report illegal dumping by calling 311. They can also report it at the [itsacrime.org](https://itsacrime.org) website (a collaborative effort of the Environmental Crimes Task Force of Central Ohio and the Solid Waste Authority of Central Ohio).



*In 2010, the MPCA investigated the illegal dumping of solid waste in Dodge County, Minnesota, which led to the enforcement of surface water quality violations.*

### Case Study: [Indianapolis, Indiana](#)

Indianapolis's trash/litter ordinance establishes the responsibilities of property owners regarding the cleanup of trash or debris dumped illegally on their properties. It aims to encourage property owners to take prompt action against illegal dumping while supporting those who qualify for assistance through the affidavit process. Elements of the ordinance include:

- Responsibility of property owners: Property owners are held accountable for cleaning up trash and debris, even if the trash is a result of illegal dumping that was not their fault.
- Notification process: The Department of Building and Neighborhood Services (DBNS) notifies property owners when their property is in violation of the ordinance.
- Timeframe for compliance: The property owner has 10 days from the notification date to either clean up the debris or submit an illegal dumping affidavit.
- Illegal dumping affidavit: DBNS may provide no-cost cleanup in response to an affidavit that is submitted on time and meets requirements.
- Consequences for non-compliance: DBNS will contract a vendor for cleanup and bill the property owner if their affidavit does not meet the criteria or if they fail to act within 10 days.

### Case Study: [Monroe County, Indiana](#)

If documentation is found within dumped materials found along a roadside that identifies a resident and/or their address, the county sends letters to suspected dumpers outlining the negative effects of illegal dumping and offers legal alternatives. Citations up to \$250 are issued when the violator can be identified. In one case, the names and addresses on discarded mail led to the identification of an irresponsible waste hauler who was placed under a cease-and-desist order for repeated illegal dumping/non-secured load violations. The county also offers free trash bags through its PAYT program to people with low income. Bags are available at township trustee offices and food banks.

## Collaboration Between Authorities, Communities, and Industries

### Establishing a Task Force

Local agencies, including police, health, environmental, public works, and sanitation departments, must work closely with local community organizations to share resources and prevent redundant efforts. Representatives from each relevant department can come together to create an illegal dumping task force to address the issue more effectively. A task force with representatives from various departments lightens the load on individual organizations. Task forces involving different levels of government (e.g., city, county, state, or federal) work together to enforce the strongest laws against offenders.

### Case Study: [Cuyahoga County, Ohio](#)

Cuyahoga County created a specialized Environmental Crimes Task Force to establish a focused, coordinated, consolidated effort to tackle illegal dumping and other environmental crimes. Some important features of this undertaking:



- **Interagency collaboration:** The Task Force is made up of representatives from local agencies. This collaboration allows for pooling resources, sharing expertise, and coordinating efforts across jurisdictions, enhancing the effectiveness of investigations.
- **Criminal investigations:** The Cleveland Police Department and the County Sheriff's Office conduct investigations together to address environmental crimes more effectively. They assign dedicated officers and detectives to focus on these crimes and promote specialization and accountability within the investigative process.
- **Diverse reporting mechanisms:** The Task Force implements multiple reporting channels to allow for greater community involvement and quicker identification of illegal activities. Reporting channels include:
  - The 311 hotline, managed by the city of Cleveland, including email communication and tracking
  - The crime stoppers hotline, coordinated by the Sheriff's Office, with email and tracking procedures in place
  - Formal complaints from citizens and council members, filed via letters or presented at council meetings
  - Inspections of scrap yards and tire shops, conducted two to three times a year
  - Informants
- **A well-informed court system:** Trained and specialized Cleveland Housing Court prosecutors, and a judge proficient in environmental law, meant that legal punishments were more effective.

## Developing Community Programs

Well-organized community programs let community members educate themselves on the importance of preventing illegal dumping and discover actionable ways to get involved.

### Case Study: [Jefferson County General Health District, Ohio](#)

The Jefferson County General Health District is listed with the Ohio EPA as an approved solid waste authority. Local law enforcement, road workers, and government officials work together to benefit the program in various ways. The Sheriff's Office has funding for litter enforcement efforts. Cleanup operations are funded by construction and demolition material tipping fees and the Board of Health. Trail cameras, gates, and signage also help prevent illegal dumping.

### Case Study: [Milwaukee, Wisconsin](#)

Milwaukee launched an incentive program that rewards people with up to \$1,000 for providing information that leads to citations for illegal dumping. By incentivizing vigilant citizens, Milwaukee aims to reduce illegal dumping and promote environmental stewardship.

## Site Management and Maintenance

Cleanup projects at illegal dump sites require coordinated planning, resource acquisition, implementation, labor, equipment, and funding. Ideas for maintaining a clean site might include:

- **Signs:** "No Dumping" signs raise awareness and educate residents on the consequences of illegal dumping. Signs may specify fines or penalties as well as warn potential dumpers of cameras in the area. Signs that specify the entity responsible for maintaining the site, such as "No Dumping: Property Maintained by ABC Community Group," may also be an effective deterrent.
- **Lighting:** Illegal dumping often occurs at night. An investment in the setup and maintenance of electrical services and equipment to light cleaned-up areas can dissuade people from dumping after dark.
- **Barriers:** Fences, posts, dividers, and large boulders are effective in limiting access to popular dump sites and abandoned areas.
- **Landscaping:** A landscaped area can dissuade illegal dumpers and attract residents to a normally abandoned area. Items such as benches, walkways, trees, boulders, and other decorative objects can transform area landscape and encourage waste cleanup.

### Case Study: [Wayne County, Michigan](#)

Wayne County's [CLEAN \(County Lending Environmental Assistance to Neighborhoods\)](#) program created an application process for municipalities and other community groups seeking to carry out cleanup projects. Wayne County provides approved

applicants with roll-off boxes, hauling, and disposal of the waste collected on site.

#### **Case Study: [Genesee County Land Bank, Michigan](#)**

In Flint, Michigan, the Genesee County Land Bank uses its Clean & Green program to maintain vacant lots as well as deepen its relationships with the community. The Land Bank partners with community-based organizations to increase their capacity to care for vacant properties, including removing illegally dumped materials. Through a competitive application process, the Land Bank awards stipends each year that allow partners to employ community members—particularly young people—to maintain at least 25 vacant properties.

## **Tracking Metrics for Improvement, Accountability, and Publicity**

Reviewing local regulations, monitoring methods, and trends from past prevention efforts is essential for maintaining an existing program or starting a new one. Documenting community cleanup events, evaluating public outreach strategies, and analyzing successes and challenges to identify effective approaches and areas for improvement can aid in program development and improve current initiatives. As well, sharing the results of prevention programs maintains support, validates local officials and community contributions, and encourages additional resource contributions.

Tracking impacts—such as arrests, convictions, fines, vehicle impoundments, cleaned-up sites, and cost savings—plays an essential role in communicating the potential successes and challenges of ongoing efforts to prevent illegal dumping. It also yields valuable data for discussing budgets and ensuring accountability for grants. In tracking impacts, it's valuable to treat them as metrics, with baseline figures against which to measure successes and shortfalls. Types of materials dumped can also be tracked to find gaps in specific education and outreach programs or to identify opportunities for increased enforcement initiatives.

Tracking methods can include:

- Using electronic mapping systems to visualize data, showing common dumping locations and inspection histories.
- Overlaying different data sets to identify trends and relationships, such as connections between problem areas and permitted facilities.

#### **Case Study: [Minneapolis, Minnesota](#)**

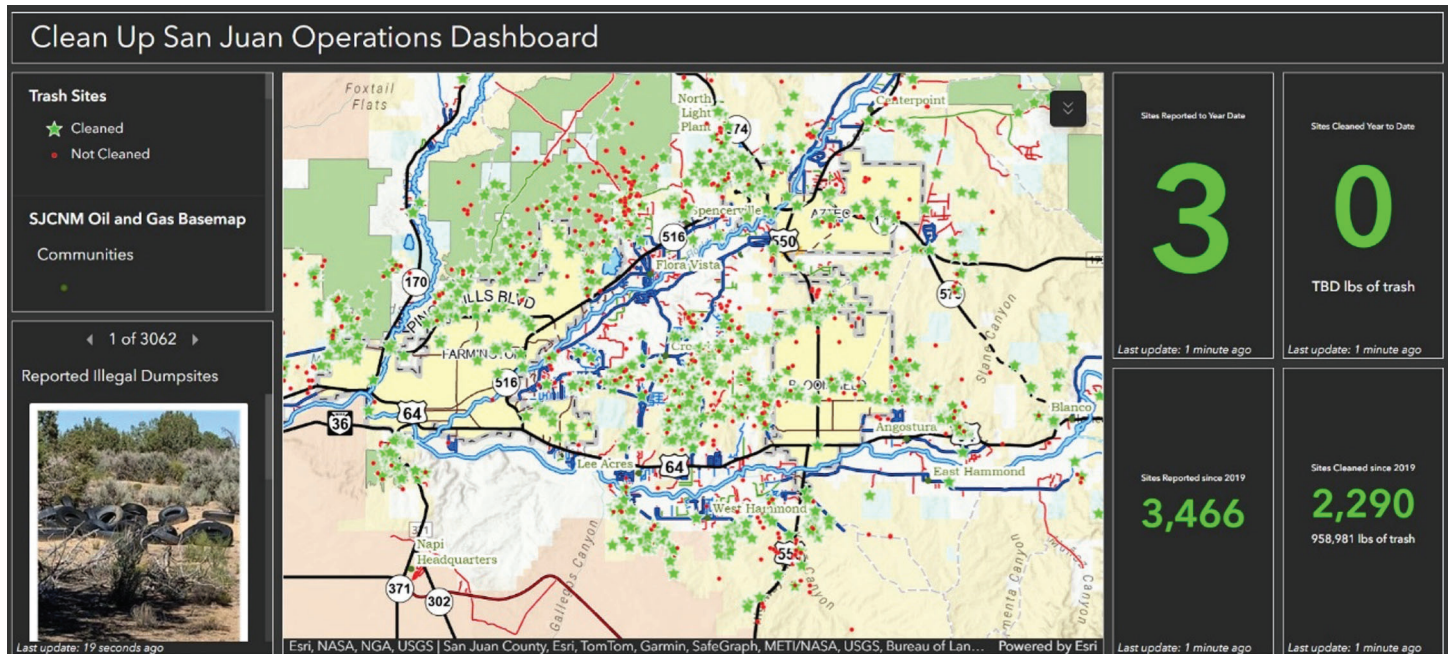
The program in Minneapolis accepts all reports of illegal dumping, including reports with no evidence. This allows for better tracking of illegal dumping trends and tailoring of efforts to diminish dumped waste. From several years of report data, the city has observed that illegal dumping most often involves mattresses and tires. The city also noted that illegal dumping reports correlate with seasonal changes, with more reports made during summer months and warmer temperatures. This type of data collection is useful in evaluating strategies, including tailoring outreach and education, increasing monitoring in certain months, or increasing disposal opportunities for certain items (e.g., bulky items, scrap tires).



*Illegal dumping at the Bois Forte Indian Reservation, Minnesota.*

## Case Study: San Juan County, New Mexico

In response to persistent illegal dumping on public lands, and as part of a broader regional beautification campaign, San Juan County developed a reporting app that lets residents report illegal dump sites with accurate GPS data and photos. The app uses GIS maps to visualize data, highlighting common dumping locations and inspection histories (see the screenshot below). This makes it possible to overlay user reports and other information to identify trends and relationships, such as connections between problem areas and permitted facilities. Regular evaluations of tracked data help the county adjust strategies and allocate resources effectively, while comparisons to baseline metrics gauge program performance. Since its launch in May 2019, the app has facilitated the cleanup of over 127,000 pounds of trash and strengthened community engagement in environmental protection (Esri, 2020).



Screenshot of San Juan County's illegal dumping dashboard, showing successful illegal dumping cleanup efforts and sites to be cleared.



# Resources and Tools

This section presents funding opportunities, resources, and tools to help prevent illegal dumping and provide cleanup site maintenance.

## Strategies for Securing Funding and Support

Getting resources for a new or growing program calls for research, creativity, persistence, communication, and cooperation. Funding sources might include community groups, local governments, corporations, and state or county programs. Grant funding, in particular, can be found through county, state, and federal environmental or public health agencies; private foundations offering environmental education or special project funding; and nonprofit organizations focused on litter reduction or recycling.

National resources for waste management grants:

- [EPA grants](#) (e.g., the [Solid Waste Infrastructure for Recycling Grant Program](#))
- [Grants.gov](#)
- [U.S. Department of Agriculture Solid Waste management grants](#)
- [Keep America Beautiful](#)
- [The Recycling Partnership](#)

State and local resources for waste management grants:

- [Calhoun County, Michigan's Illegal Dumping Grant Program](#)
- [Ohio EPA Recycling and Litter Prevention Grant Program](#)
- [New Mexico Department of Transportation Beautification Program](#)

## EPA Illegal Dumping and Waste Management Tools and Resources

- EPA's [Stormwater Best Management Practice: Illegal Dumping Control](#) provides practical strategies to help communities prevent and address illegal dumping. It offers guidance on engagement, enforcement, and collaboration to promote cleaner, healthier environments.
- EPA's [Disaster Debris Recovery Tool](#) can help communities plan and manage debris recovery during large-scale disasters. The tool can identify infrastructure for waste management and recycling in affected areas. For further planning, the [Recycling Infrastructure and Market Opportunities Map](#) shows additional solid waste infrastructure opportunities across the country.
- EPA's [Training Resources for Tribal Waste Management](#) directory provides tools and information to support effective waste management in Tribal communities. It includes training materials, best practices, and guidelines aimed at enhancing environmental protection and promoting sustainable waste practices. Key resources include:
  - [Closing Small Tribal Landfills and Open Dumps](#). This document provides practical guidance for Tribal communities on the safe closure of small landfills and open dumps. It outlines key considerations, design strategies, and best practices for environment soundness and sustainability.
  - [Don't Trash Our Land: Prevent Illegal Dumping](#). This guide outlines the dangers of illegal dumping, including health risks from mosquitoes and rodents, physical hazards, fire hazards, flooding, contamination of water sources, and increased crime. It provides steps for reporting an illegal dump site, as well as proper disposal methods for household waste, bulky items, tires, car batteries, and hazardous materials.
  - [Technical Advice Document for the Cleanup of Accumulated Waste Sites](#). This document offers comprehensive guidance on effectively managing waste site cleanups. It includes sample plans for cleanup, remediation, reclamation, and health and safety, along with recommendations for public participation and recordkeeping.
  - [Respect Our Resources: Prevent Illegal Dumping](#) and [Innovations in Tribal Waste Management: Open Dump Prevention](#). These two issues of EPA's *Tribal Waste Journal* outline Tribal perspectives on establishing effective illegal dumping prevention programs and working with communities and businesses.

## Additional Tools

The Center for Community Progress's [Reevaluating Code Enforcement: A New Approach to Addressing Problem Properties](#) is a guide for local governments on considering the benefits of shifting from traditional code enforcement to the more strategic approach of code compliance. It describes how such a shift can be applied to common problem property types and problems, such as illegal dumping, and includes examples from the national field of practice.

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