



METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

Agenda

Meeting: Joint Solid Waste Policy / Technical Committees
Date: April 12, 1991
Day: Friday
Time: 7:30 - 10:30 AM
Place: Council Chambers
Metro Center
2000 SW First Avenue
Portland, OR 97201

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- | | |
|--|---|
| I. Committee Members and Citizen Communications | Judy Wyers |
| II. Updates | Rich Carson |
| III. Approval of Illegal Dumping Chapter of the Regional Solid Waste Management Plan (draft chapter attached) | Sharron Kelley /
Ron Nagy |
| IV. Discussion of Washington County Policy / Technical Analysis* | Rich Carson /
Becky Crockett |
| V. Adjourn | Judy Wyers |

* Due to the bulk of the policy/technical analysis packet, copies have been sent to committee members only. The analysis is available to interested persons and may be obtained by contacting Metro's Planning and Development Department.



METRO

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Memorandum

Date: April 4, 1991

To: Policy & Technical Committee Members

From: *pkc* Rich Carson, Director, Planning & Development Department

Subject: Policy & Technical Analysis For the Washington County System Plan

Included in your packet is the completed Policy & Technical Analysis for the Washington County Solid Waste System Plan. The Analysis document contains the results of the technical analysis as well as recommendations regarding key policy questions.

The Policy and Technical Committee have been kept informed throughout the project through regular updates. The purpose of providing both Committee's members with the analysis; and, scheduling the joint Policy and Technical Committee meeting is to present the completed analysis to both Committees, answer questions and receive comments.



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2000 S.W. First Avenue
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Memorandum

DATE: April 4, 1990
TO: Policy / Technical Committees
FROM: *RC* Rich Carson
SUBJECT: Draft Illegal Dumping Chapter

The April 12th meeting will include review of the draft Illegal Dumping Chapter of the Regional Solid Waste Management Plan (RSWMP). Work on the chapter, originally slated for completion in June, has been expedited in order to strengthen current illegal dumping legislation. The Chapter has been developed by Planning staff with the assistance of the Illegal Dumping Subcommittee, which includes representatives from state and local governments and interested citizens.

The draft Chapter is based on RSWMP Policy 4.0 which was adopted with the RSWMP in 1988. It includes a background of illegal dumping issues from a national and local perspective, an analysis of regional issues, recommendations for solutions and identification of roles and responsibilities. An important recommendation made in the Chapter is to establish a larger role for Metro in promotion and education.

Approval of the Illegal Dumping Chapter by the Policy and Technical Committees at this meeting will allow staff to begin the Council adoption process. Implementation of Chapter recommendations will help stem this costly and unsightly problem.

DRAFT

CHAPTER 4

ILLEGAL DUMPING

POLICY

- 4.0 Solutions to the problems of illegal dumping and to other adverse impacts caused by changes in the waste management system shall be developed cooperatively by DEQ, Metro and cities and counties.

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PURPOSE

The Illegal Dumping Chapter addresses the problems associated with illegal disposal of solid waste in the Portland metropolitan area. The Chapter was developed in response to concerns that as the costs of waste disposal services increase, incidence of illegal disposal appears to increase commensurately. While it has not been determined empirically that this is the case, Metro recognizes the potential for such a situation.

The Chapter has been developed with the input of state and local government as well as non-profit citizen organizations, and recognizes the roles of all affected parties. The Illegal Dumping Chapter addresses the issue by establishing causes, characterizing various facets of the problem and recommending solutions for appropriate individuals and agencies.

The objective of the Illegal Dumping Chapter is to reduce the incidence of illegal disposal of solid waste in the Portland metropolitan region in order to:

- mitigate an unsightly and potentially health-threatening problem;
- ease the financial burden of abatement on local governments and property owners;
- remove illegal dumping as an obstacle for meeting waste reduction goals;
- capture disposal revenue that is otherwise lost.

The Chapter was developed through methodical identification of the types of materials dumped, establishment of sites where dumping occurs and acknowledgment of affected parties. The issues were prioritized and those receiving a higher priority were subjected to in-depth research and analysis.

Background information was compiled from interviews with local government solid waste and nuisance control staff in the metropolitan area. Recommendations to mitigate illegal dumping in the Portland metropolitan area are presented in the final section of the chapter and are tailored

to appropriate agencies and individuals.

There are some issues the chapter does not address due to regulatory constraints, overlapping of authorities and a need to keep the scope of analysis focused on issues of regional significance. These issues include the following:

- *Hazardous and medical waste disposal* is regulated by federal and state laws that impose criminal penalties for violations. Hazardous waste disposal is not addressed because Metro does not have authority in this area. In terms of regional coordination of penalties, illegal dumping of hazardous wastes should remain a criminal violation, rather than a civil violation, to effectively deter incidence.
- *Roadside litter*, except that which is found in solid waste facility impact areas, is an issue that was separated from roadside illegal dumping. Although specific volume or quantity guidelines were not developed, it is relatively easy to delineate litter from dump sites.
- *Private industrial dump sites*. Some local industries may store or dispose of specific materials on their property. Metro does not have the ability to regulate this practice as the material may be a source-separated recyclable material and may not be considered a waste until an attempt is made to dispose at a Metro facility. Regulation of this practice must be through local industrial zoning codes.

BACKGROUND

Illegal dumping of solid waste is unsightly and unsanitary in addition to creating potential environmental problems. Nationwide, incidence of illegal dumping of solid and hazardous waste has increased along with the cost of environmentally responsible solid waste management. It is believed that incidence of illegal dumping rises with increased disposal fees.

National context

State governments in Massachusetts, Vermont and New Jersey are approaching the problem by establishing rewards and increasing fines. In Georgia, property owners are liable for illegal dumping violations, a situation which results in an incentive for property owners to apply both preventive measures and immediate cleanup. Local governments in Collin County, Texas and Alachua County, Florida focus on community awareness and siting roadside refuse and recycling containers as a tool for reducing the problem.¹

¹ Shirley Hawk, "Making War on Illegal Dumping," *Waste Age*, November 1989, page 108.

In New York City, sanitation police are authorized to impound the cars of violators caught illegally dumping. As many as 314 vehicles were impounded during a two month period in 1990. Fines range from \$600 to \$12,500 may be levied against drivers and owners of vehicles, who must post a bond, pay an impoundment fee and a daily storage fee to reclaim their vehicle.²

Memphis, Tennessee approaches illegal dumping through establishment of an Environmental Court to handle municipal code violations related to health, fire, housing, building and zoning codes. This has resulted in increased overall code compliance and reduced incidence of illegal dumping.³

Nationwide, individuals and agencies involved in illegal dumping issues agree that consequences, costs and environmental effects of illegal dumping must be understood by the population at large so that needed legislation and funding can address the problem.

Local issues

Illegal dumping in the Portland metropolitan area occurs in a wide range of sites, includes a variety of materials and affects broad segments of the population. Initial research identified the following local problems.

- Enforcement of illegal dumping regulations is difficult. One reason is because various local government agencies have this responsibility and neither enforcement mechanisms nor penalties are consistent from jurisdiction to jurisdiction.
- Illegal use of dumpsters at retail, commercial and industrial sites is increasing. This has been identified as a particular problem along commercial strips in Clackamas County.
- Non-profit charitable organizations also report that illegal dumping at their facilities and drop-off centers has increased over the past few years as the region's costs of disposal have increased. A large majority of this material is so contaminated it can not be sorted and must be immediately disposed. The cost of disposing of this waste has had an especially hard impact on these agencies serving lower-income clients.
- Dumping is occurring at vacant lots in low-income residential areas of the region. Illegal disposal is a common occurrence in a wide range of residential areas but it appears that there is a higher incidence in neighborhoods that appear less affluent. Unlicensed "handyman" haulers may be profiting from a situation in which residents who

² "Police Nab Illegal Dumpers," *World Wastes*, August 1990, p. 10.

³ Shirley Hawk, "Making War on Illegal Dumping," *Waste Age*, November 1989, p. 108.

are unable to afford regular garbage service pay such unlicensed haulers to have their refuse disposed. The hauler then illegally dumps the refuse. It is thought that this is occurring as a result of increasing tip fees, unregulated collection by unlicensed haulers and the proximity of vacant lots in low-income areas.

- Incidence of illegal disposal has been increasing along the Sandy River Highway, and Clackamas County roadsides: A traditional method of rural waste management has been disposal of waste on one's own property or self-haul to a disposal site. Due to the lack of conveniently located facilities for self-haulers, the cost and time associated with hauling to regional disposal sites, and the relative abundance of lightly traveled roads, illegal disposal is a problem in many rural areas of the region. The cost of clean-up can be expensive when material is disposed of in steep ravines or gullies.

- Portland parks (Forest Park), Rivergate industrial park, Troutdale Airport, Portland International Airport, and the Hillsboro Airport all experience problems with illegal disposal. Large tracts of park and recreational space are also subject to illegal disposal activity. Illegal disposal sites create a marketing problem for industrial sites and damage wildlife habitat within parks.

- Incidence of illegal disposal of bulky materials such as white goods, tires, and car bodies has been increasing. Bulky items require unique collection practices. Pick up service for these items is not readily available in many parts of the region. Unregulated haulers may provide inexpensive pickup only to later dispose of the items inappropriately.

- Illegal disposal of construction/demolition debris and land-clearing debris as inert fill may be a widespread problem throughout the region because inert fill sites are unprotected and unsupervised. Use of inert fills as disposal sites for mixed waste poses significant risk to the environment.

Metro region context

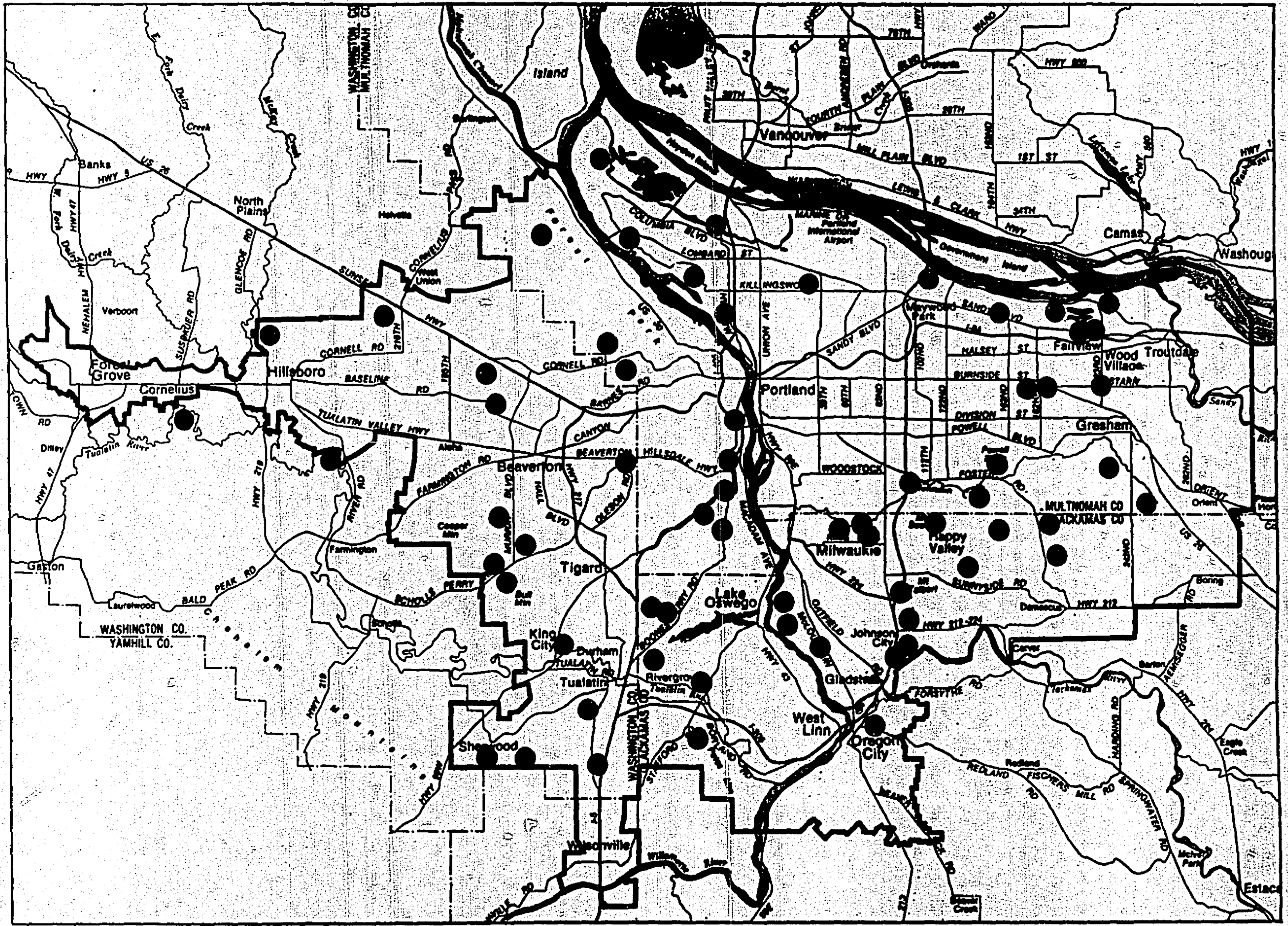
In June 1988 Metro completed a survey of sites where illegal dumping of waste was known to occur. The survey was conducted to establish a baseline of information to determine if illegal dumping would increase with rising tip fees. Metro updated its information base on illegal dumping in 1989 in an effort to:

- measure the effect, if any, of subsequent rate increases on number of illegal dumping incidents;
- establish the location of sites within the Metro area where illegal dumping is a chronic problem; and

- assemble background information to assist in defining the scope of Metro's role.

The initial survey was intended to identify sites and drew no conclusions. The 1989 follow-up survey concluded that illegal dumping was a pervasive problem in the region, but it was difficult to demonstrate that rate increases directly contribute to illegal dumping of refuse by a greater number of individuals.

The following map is a compilation of known illegal dump sites in the Metro region from the initial survey in 1988 to 1991. The map indicates patterns of illegal dumping in both densely populated urban areas and more secluded rural areas of the region. Many of the sites indicated are sites where dumping is a chronic problem, justifying the three-year accumulative identification. The map demonstrates the severity of the issue for the Metro region.



METRO

Illegal Dump Sites 1988 - 1991

2000 S.W. First Ave., Portland, OR 97201-5398, (503) 221-1646, 1" = 4 mi., 7-87-01

Incidents of illegal dumping are currently handled by a variety of state and local government agencies. The Oregon Department of Transportation is responsible for dump sites that occur on roadsides under its jurisdiction. The Port of Portland is responsible for sites that appear on industrial land owned by the agency. Below is a description of the problem as it affects major divisions of local government in the Portland metropolitan area.

Clackamas County

Clackamas County has an ongoing program to control illegal dumping. County Solid Waste staff report that most illegal dumping occurs on roadsides and dead-end streets. Improved, but not heavily travelled roads in the County's urban area have shown the highest incidence of illegal dumping.

Illegal dumping in the form of unauthorized use of commercial dumpsters at shopping malls has also become evident, primarily on McLaughlin Blvd.

Clackamas County provides a cleanup crew for dumping which occurs on county-owned property. Enforcement mechanisms are not typically available unless the perpetrator is either caught in the act or identified by an eyewitness. Clackamas County may choose to prosecute offenders under ORS 164.785 (Placing offensive substances in waters, on highways or other property). Violations under ORS 164.785 constitute a Class A misdemeanor: the convicted illegal dumper may be levied a penalty of up to \$1000.

A specific enforcement tool available to Clackamas County is to threaten impoundment of vehicles of persons identified as illegal dumpers. The vehicle would be held to cover the cost of cleanup.

Washington County

Washington County staff report that they have not seen an increase in illegal dumping on public lands although problems continue to exist at specific sites around the County. Disposal costs for the fraction of illegally dumped refuse requiring disposal in a general purpose landfill were an estimated \$6,500 in 1990. A particular problem is seen with individuals who use their own property to illegally dispose their garbage.

The County Health Department enforces a nuisance code which holds property owners responsible for removal of accumulations of refuse or debris. This is the case even if the property owner was not the perpetrator. If a property owner does not clean up an identified site, a citation is issued. A maximum penalty of \$500 per day of violation can be levied against the property owner. If there has been a prior conviction of a violation of the nuisance code within two years, the penalty increases to a maximum of \$1000 per day of the current violation. Failure to appear at a court hearing or falsifying information related to the violation is cause for

additional fines or imprisonment.

Persons caught illegally dumping can be prosecuted under ORS 164.785. Violations, when reported, are typically referred to the County Sheriff's Department. Presently, most violations are unreported and cleanup is left to the property owner.

Multnomah County

There has been a chronic problem with illegal dumping at access turnouts along the Sandy River Highway, at the eastern edge of the Metro boundary. In March 1989, an accumulated six tons of illegally disposed refuse which included household garbage, white goods and animal carcasses cost Multnomah County approximately \$8000 to clean up. The County has had some degree of success in containing the problem by installing barricades at the sites.

If an illegal dumper is apprehended and convicted in Multnomah County, they are subject to a \$500 fine for offensive littering under ORS 164.805, as well as a \$500 civil fine for illegal accumulation of solid waste.

County nuisance control staff suggested that additional reports of illegal dumping incidents in the Columbia Gorge National Scenic Area are possibly being channeled to the Forest Service or to Mt. Hood National Forest. In 1990, enforcement personnel at Mt. Hood National Forest reported more than 775 incidents of illegal dumping in the ranger districts on the urban fringe. The majority of incidents occur on the Larch Mountain road, the Columbia River Scenic Highway and in the Bull Run vicinity. Illegal use of Park dumpsters for household refuse was also reported. In addition, personnel at the National Forest reported the existence of two major illegal tire piles, one with 3,000 and one with 10,000 tires. The National Forest has litter and sanitation regulations that enable them to require the convicted perpetrator to clean the site or pay the cost of cleaning the site.

City of Portland

Illegal dumping in the City of Portland appears to occur most frequently on vacant property in low-income areas. Portland nuisance control staff report that there has been a marked increase in dumping near abandoned buildings in residential areas.

The City holds property owners responsible for cleanup of illegally dumped refuse. If property owners do not comply with a cleanup order within fifteen days, the City contracts for cleanup and levies a fine of \$200 in addition to the cost of cleanup plus 26% overhead. The City levies additional penalties for repeat complaints.

Metro region context: *Summary*

Illegal dumping issues in the Metro region affect area local governments in two major respects: 1) cost and personnel required to enforce existing regulations, and 2) cost and personnel required to clean up illegal dump sites. Added to these factors is the administrative cost of processing notices and prosecuting identified violators. While no effort was made to estimate the total fiscal impact on the region as a whole, it may be assumed to be significant.

Analysis of regional issues

Analysis of illegal dumping issues in the Portland metropolitan area yielded a list of specific types of *sites* where illegal dumping occurs, types of *materials* dumped, and *affected parties*. Where appropriate, analysis includes discussion that addresses probable causes, which are identified as *economic*, *convenience*, and *behavioral*.

■ Enforcement

Enforcement of state and local regulations that address illegal dumping is difficult at best. For violations that are classified as criminal, judges typically require eyewitness evidence for conviction. Given that most illegal dumping occurs in remote areas, eyewitness evidence is unlikely. Designation of enforcement personnel and their level of empowerment may vary from jurisdiction to jurisdiction. Since most courts are overburdened with cases involving more serious crimes, it is not surprising that most judges consider illegal dumping violations to be a trivial offense and therefore a very low priority; penalties often reflect this attitude.

Mere notification of illegal dumping violations appears to be an effective enforcement mechanism. When suspected violators are notified and informed of potential penalties if convicted, they may be easily persuaded to clean up the illegally dumped waste.

■ Vacant lots (residential)

Illegal disposal in low-income residential areas and other vacant properties in urban, suburban and rural areas is a major issue. This issue was identified as a high priority, requiring an in-depth analysis in order to make recommendations to the appropriate individuals and agencies.

- *Economic*. Dumping in vacant residential lots appears to be a problem primarily in three areas: low-income residential areas with a large number of vacant houses, mixed urban residential areas with large wooded lots and sparsely populated areas on the urban fringe. Primary motivation for illegal disposal in these areas is the inability or unwillingness to pay the cost of disposal.

- **Convenience.** If adequate collection and recycling service is not available on a regular basis, or if availability and time of pickup is not well understood, generators of solid waste may not be inclined to use conventional services. The alternative is to save waste until there is a sufficient quantity to haul to a disposal facility -- or to dispose illegally. If collection services are not used (use of collection service is voluntary, not mandatory), it is important that self-haul options are well understood.

- **Behavioral.** Reasons for illegal dumps in low-income areas may be traced to individuals who do not have a fundamental understanding of the environmental and economic consequences of their actions. When an area appears to be unkempt due to litter and illegal dumping it invites further activity. It must be stressed that these individuals are not necessarily residents of low-income neighborhoods. Lack of education and a general sense of disenfranchisement from public agencies may play a role.

■ Open areas (public)

This category includes illegal disposal in parks, playgrounds and natural areas. Analysis and subsequent recommendations are focused on areas within the Metro boundary, but information regarding illegal disposal in open areas outside the boundary was not excluded.

- **Economic.** Open public areas offer ample opportunity to dispose bulky wastes for both visitors and persons who live near these areas. It may be surmised that motivations to illegally dispose of waste in public open areas are largely based on economic considerations. The cost of disposing bulky materials by persons who live in rural areas that are adjacent to open areas may influence the illegal disposer to make the wrong choice.

- **Convenience.** Convenient collection service may be limited or unavailable to persons who live near or adjacent to public open areas, but this is unlikely. This could possibly lead to use of less visible public open areas as dumps. An additional factor may be that users of public open areas may illegally dispose or litter if convenient refuse disposal containers are not available.

- **Behavioral.** Persons living adjacent to open areas have traditionally enjoyed the freedom to accumulate refuse on their property. It is known that when a refuse pile is visible it invites further dumping in the vicinity. Users of open areas may not understand the implications of their behavior when they carelessly dispose of solid waste. This may be due to the lack of a sense of "ownership" with public areas, or a general sense of disenfranchisement from public agencies who manage open areas.

■ Roadsides

Illegal disposal on roadsides includes: (1) refuse on roadsides as a result of solid waste and recycling activities; and (2) litter and other illegally disposed refuse found on roadsides.

- *Economic.* Economic motivations that may be associated with illegal disposal on roadsides may be similar to those described above. Additionally, citizens who self-haul solid waste or any other type of load may not be able to afford adequate equipment for the purpose. Transient camps in highway right-of-ways presents an additional problem with an economic cause.

- *Convenience.* If a load is inadvertently scattered or lost, it may be both inconvenient and hazardous to retrieve. Also, individuals may illegally dispose of litter in small or large quantities unless disposal containers are conveniently located at highway turnouts.

- *Behavioral.* Dumping and/or scattering of loads by both private and commercial vehicles is usually the result of carelessness or lack of understanding of consequences. Isolated incidents of deliberate scattering frequently occur.

■ Open areas (commercial and industrial)

This category includes illegal disposal in open areas that are located in or near sites of industrial or commercial activity. Analysis was mainly focused on commercial and industrial areas that are in the vicinity of solid waste and recycling facilities.

- *Economic.* Like the issues of dumping in vacant lots of residential areas and public open spaces, deliberate illegal disposal in commercial and industrial open areas may be the result of inability to pay the cost of conventional disposal.

- *Convenience.* Convenient collection service may be limited or unavailable to persons who live near or adjacent to commercial or non-waste disposal industrial open areas. This could possibly lead to use of less visible open areas as dumps.

- *Behavioral.* Some commercial or industrial open areas may not be well kept. This may invite illegal dumpers to add seemingly insignificant amounts to what appears an existing dump.

■ Bulky materials (Furniture, appliances, autos)

Furniture, appliances, tires and other large bulky items that are abandoned or otherwise illegally disposed comprise this category. These items constitute a significant amount of illegal dumping in the Portland metropolitan area.

- **Economic.** These materials can be costly to dispose, especially if pick up is required. The alternative of casting off bulky materials in the sites identified may seem an inexpensive solution to illegal disposers.

- **Convenience.** In addition to cost, as discussed above, disposing of bulky materials may occur if adequate service is not available. This may be especially true in rural areas.

- **Behavioral.** Some illegal disposers may travel great distances and expend much effort to dispose of bulky items that may even possibly be recycled or sold. This indicates a fundamental lack of understanding of cost of disposal, environmental consequences and social responsibilities.

■ Construction and demolition debris (C&D)

Included in this category is debris from construction, demolition and land clearing that is illegally disposed. This aspect of illegal dumping was analyzed in the context of management practices identified in chapter 3, Special Waste.

- **Economic.** Illegal disposal of C&D materials is usually perpetrated by private individuals and disreputable contractors who do not wish to incur the costs of disposing unusable or unwanted materials from small construction and/or demolition projects.

- **Convenience.** Disposal of C&D material is not always convenient. Material must either be hauled or picked up from the site by a haulers or recyclers. Currently, there are haulers and recyclers who specialize in serving construction and demolition sites. A problem lies in the fact that the sites may be within a franchised collection area, resulting in potential violation of a collection franchise agreement.

- **Behavioral.** Illegal disposal of C&D materials is perpetrated by individuals involved in home improvement projects as well as construction and demolition contractors. In either case it is difficult to justify that it is a convenient alternative in view of the fact that some illegal disposers travel great distances and expend much effort to dispose of material that may be recycled or sold. This indicates a fundamental lack of understanding of value of recyclable material, cost of disposal, environmental consequences and social responsibilities.

■ Mixed solid waste in inert fills

This category includes municipal solid waste mixed with material designated as clean fill and deposited at inert fill sites.

- **Economic.** In addition to major disposal sites like Lakeside Reclamation Landfill, there

are many small, effectively unregulated inert fills in the metropolitan area that accept material for no charge. When putrescible solid waste is mixed with desired material (dirt, rocks, concrete) odor and leaching problems arise. Some disposers may consider mixing solid waste with inert fill an economical means of disposal.

- *Convenience.* As indicated above, mixing in quantities of solid waste may serve as a convenient means of disposal for those using the inert fill legitimately. Another side of the problem is that inert fills are widely distributed throughout the region and offer ample opportunities for illegal disposers of household, commercial or industrial wastes.

- *Behavioral.* Mixing putrescible waste with fill material may be the result of unintentional contamination or a deliberate act to conveniently dispose waste that is not approved for inert fills. This indicates a fundamental lack of understanding of cost of disposal, environmental consequences and social responsibilities.

■ Non-profit charitable organizations

Illegal disposal of refuse and abandonment of useless articles at charity recyclers creates an economic burden for non-profit benevolent organizations. Although this issue was identified as significant, it was not subjected to analysis for the development of the Illegal Dumping Chapter. Instead, Metro has undertaken an effort to provide recycling credits towards the cost of disposal, an approach that recognizes the amount of material these organizations reuse and recycle in comparison to the amount of material that cannot be processed.

■ Illegal use of dumpsters

Illegal use of dumpsters in parks and at commercial and industrial areas places an economic burden on those responsible for maintenance. In effect, the operators of these sites subsidize the portion of the population choosing illegal disposal over responsible behavior.

- *Economic.* Many individuals dispose household waste in dumpsters located in shopping malls and other commercial districts. Illegal disposers of this sort typically do not choose to have residential collection service.

- *Convenience.* Convenient collection service may be limited or unavailable to persons who illegally use dumpsters.

- *Behavioral.* Illegal use of dumpsters is difficult to justify in view of the fact that some illegal disposers travel great distances and expend much effort to dispose of items that may even possibly be recycled or sold. This indicates a fundamental lack of

understanding of cost of disposal, environmental consequences and social responsibilities.

■ Waste tires

Waste tires represent a significant solid waste problem. Approximately two million tires are discarded in Oregon each year; less than half that amount are reclaimed. Many of those that are not reclaimed are illegally disposed.

- *Economic.* Cost of pickup for waste tires currently ranges from \$3 to \$5 each. If an individual chooses to self-haul to a transfer or disposal facility, the cost is \$1 per tire or \$3 per tire on the rim. Truck tires are more costly to dispose. In the absence of a tire deposit or other incentive to recycle waste tires, individuals may choose to stockpile tires.

- *Convenience.* Disposing waste tires is currently inconvenient. Refuse collectors are reluctant to pick them up since they are legally restricted to carrying fewer than nine tires without obtaining a permit.

- *Behavioral.* When individuals purchase new tires, there is an inclination to keep their old tires rather than giving them to a tire dealer. Waste tires may also be illegally disposed by irresponsible individuals who derive pleasure in casting rolling objects from a moving vehicle. It is necessary to target the segment of the population prone to such activities with an educational campaign.

■ Untarped loads at solid waste facilities

Uncovered loads arriving at transfer and recycling facilities result in a significant amount of litter that is blown off the open vehicles. This is a problem with both commercial waste haulers and individual who choose to self-haul. Metro is currently developing a policy to assess penalties for untarped loads.

CONCLUSIONS

Throughout the country, illegal dumping is an issue that appears to be growing in significance. It is generally agreed that there is a need to educate the public as to the consequences, costs and environmental effects of illegal dumping so that necessary enforcement and funding mechanisms can be developed to address the issue.

Illegal dumping also continues to be a problem in the Metro area, but there does not appear to be any empirical evidence that correlates rising tip fees and an increasing number of dumping incidents. If rising disposal fees do indeed affect the incidence of illegal dumping, then it may be assumed that the problem will continue to increase in proportion. An analysis of collection

options would be a meaningful exercise in addressing potential solutions to illegal dumping in the metropolitan area.

The analysis conducted in developing this chapter has identified materials, affected parties and locations in the Metro area where illegal dumping is a chronic problem, and has shown that the largest issues are enforcement, lack of effective penalties, lack of knowledge of appropriate disposal options, dumping in vacant lots in residential areas, public and private open spaces, waste tires and litter at solid waste facility impact areas. Reasons for illegal dumping fall into three major categories: economic, convenience and behavioral. Problems associated with lack of education and consistent enforcement represent a major obstacle to reducing incidence of illegal dumping.

RECOMMENDATIONS: Regional Illegal Dumping Work Program

This section includes recommendations for solutions to illegal dumping, outlines the Regional Illegal Dumping Work Program and addresses roles and responsibilities. Each issue was analyzed according to three factors: *economic*, *convenience*, and *behavioral*. Using this method, non-enforcement recommendations were developed according to the following scheme:

<i>Cause</i>	<i>Solution</i>
Economic	Funding / incentives
Convenience	Improvement of service
Behavioral	Education / promotion

Where recommendations involve enforcement mechanisms, that recommendation is outlined in the enforcement section.

The following general recommendations were identified as potential solutions to illegal dumping in the Portland metropolitan area as a result of analysis of causes.

Enforcement

There is a need for both increased enforcement of existing laws and coordination of penalties. Currently, the state and each local jurisdiction handles illegal dumping through different divisions, a situation which may result in less effective interagency coordination on illegal dumping issues that are interjurisdictional. Another facet of the issue is that local budget constraints result in placement of illegal dumping enforcement as a lower priority. This situation is exacerbated by the fact that it is difficult to get a conviction for illegal dumping violations without eyewitness identification. An additional enforcement consideration is that, as responses to illegal dumping violations increase, illegal dumpers may travel farther from the

urban area resulting in a higher level of illegal dumping on both public and private forest lands outside of the Metro boundary. The following recommendations address enforcement.

- **Develop or amend nuisance codes to enhance the ability of local jurisdictions to enforce against illegal disposal.** Currently, nuisance codes in most jurisdictions are not easily enforced. An exception is Clackamas County, which has the ability to confiscate vehicles to cover the cost of clean-up of an illegal dump site.
- **Consistent penalties.** A need for development of a model illegal disposal ordinance with provisions for consistent and effective penalties has been a major focus of the Illegal Dumping Task Force / Subcommittee. Such an ordinance would support legislation aimed at increasing penalties as well as help clarify authorities and eliminate the problem of lower fines administered by the state taking precedence over higher fines that are administered locally.

Education / Promotion

The most effective means of addressing issues that have been identified as having behavioral causes is to educate the public as to costs and consequences of their behavior in addition to promotion of the appropriate recycling and disposal practices.

- **Public education.** Greater awareness of the environmental and economic consequences of illegal dumping could result in fewer incidents. Many individuals who dispose of yard debris in ravines do not consider their actions to qualify as illegal dumping. A public campaign to inform the public of the location of transfer stations and other disposal sites would also result in a decrease in illegal dumping.

Educational programs should target potential illegal dumpers. For instance, young persons with an interest in working on automobiles should gain an understanding of appropriate junk car and waste tire disposal practices. Individuals and businesses that do yard maintenance work and landscaping should be targeted with materials describing appropriate yard waste recycling and composting options. The public at large needs to be better informed of options for recycling and disposal of bulky materials including furniture and appliances.

- **Hotline for reporting illegal dumping.** More incidents of illegal dumping would probably be reported if an easily remembered public hotline were made available. The hotline number could be directly referred to nuisance abatement enforcement personnel.

Preventive measures

Illegal dumping has been reduced in some cases through installation of barricades. This is a

costly solution initially but may result in lower long-run cleanup costs.

- Barricades and improved lighting at known sites of illegal dumping activity have demonstrably reduced the number of dumping incidents. Barricades may either be temporary or permanent. If permanent barricades, such as concrete highway dividers or guardrails, are installed, aesthetics and maintenance must be considered.
- Increased signage may deter potential dumpers. Signs should reflect the severity of penalties and potential for rewards.

Improvement of Service

Convenience has been identified as a major cause of illegal dumping. If service can be improved to the point that it is as convenient to recycle and dispose of refuse, the option of illegal dumping will be less attractive. Improvement of service may include instituting more efficient refuse and recycling collection systems, an issue that has been identified as needing further analysis.

- Region-wide annual clean-up events. Currently, localized clean-up events are sponsored by neighborhood organizations. More coordinated cleanup events are sponsored by Stop Oregon Litter and Vandalism (SOLV). More frequent cleanup events that are coordinated on a region-wide basis would offer an opportunity for a greater number of individuals, businesses and organizations to have an effect on existing dump sites and increase public awareness of the problem. Metro, local governments and haulers could combine forces to promote cleanup events similar to household hazardous waste collection events.
- Enhanced recycling incentives. If it was more convenient and economically viable for waste generators to recycle, fewer individuals would be prone to dispose of recyclable items illegally. Deposits on items such as tires and appliances may fall in this category. This would provide a strong incentive to recycle the item.
- Conveniently located disposal and recycling facilities. Distance from site of generation to disposal and recycling facilities may act as a disincentive to responsible disposal practices. Recycling and disposal containers may be located in areas where there is a high incidence of illegal dumping. Such containers have proven to be effective in deterring illegal dumping along highways in rural Bulloch County, Georgia. The County maintains the containers under the premise that it is more cost-effective than cleaning up illegal dump sites.

For the Metro area, such an arrangement would constitute a change from current practice: local governments would have to weigh the cost of providing and maintaining

containers with the cost of remediating rural illegal dump sites. An option is to levy an established percentage of the cost to a special benefit district of property owners who would rather maintain dumpsters than continually clean up illegally dumped refuse from their property.

Funding / Incentives

For those problems that have been identified as economic in nature, means of providing funding and/or economic incentives to appropriate parties is addressed.

- **Subsidies for low-income households.** Some illegal dumping may occur because of economic hardship. If required collection service is instituted, the financial burden will increase. This issue would require extensive policy analysis.
- **Metro should continue to fund local community cleanup events.** Metro includes funds in its annual budget to support community cleanup efforts.

Specific recommendations

The following recommendations target specific issues identified and analyzed in this chapter.

- **Untarped loads at solid waste facilities**

Uncovered loads arriving at transfer and recycling facilities result in a significant amount of litter that is blown off the open vehicles. This is a problem with both commercial waste haulers and individual who choose to self-haul. Metro is currently proposing an approach to discourage litter at facilities by levying a \$25 fine for cash customers and a \$100 fine for credit account customers with untarped loads.

The approach of levying a fine may be more effective than other measures. If untarped loads were refused altogether, loads that would otherwise have been disposed properly may be subject to illegal disposal by frustrated individuals. It is recommended that the practice of levying fines for uncovered loads be used.

- **Bulky materials (Furniture, appliances, autos)**

Improvement of service. Pick up service should be enhanced, especially in areas outside of the City of Portland. Currently, individuals who live in Portland and wish to recycle or dispose of an appliance may have it picked up for a nominal charge by one of two recyclers. Alternatives include free drop off at Metro transfer stations or drop off at one of two scrap recyclers. Individuals outside of the immediate Portland area are currently not as well served.

Education / Promotion. Education of recycling/disposal options and consequences of illegal disposal of these items should be a priority. Metro's Recycling Information Center currently receives 2-3 calls per day requesting information on recycling/disposal options for appliances alone. This indicates a need for better promotional efforts.

Funding / Incentives. Incentives for haulers to establish improved on-call service for pick up would result in less illegal dumping, particularly in areas outside of the City of Portland. Currently, there are only 2 recyclers providing pick up service for appliances in Portland.

- **Construction and demolition debris (C&D)⁴**

Enforcement. To stem illegal disposal of C&D materials, it is necessary to target construction and demolition permitting practices. Authorization for building and demolition permits compliance could include a statement of how a contractor is disposing any C&D materials.

Improvement of service. Haulers and recyclers who specialize in serving construction and demolition sites are thwarted by the fact that a site may be in a franchised collection area, resulting in a violation of a collection franchise agreement. This situation must be addressed in such a way as to both stem incidence of illegal dumping and to enhance recycling of C&D materials. A process to allow C&D recyclers to subcontract with franchised haulers should be considered.

- **Waste tires**

In 1987 the Oregon Legislature passed House Bill 2022 to address the problem of waste tires, setting up the Waste Tire Program. Through the Program, DEQ requires a permit for storage and transport of more than 100 tires. Exceptions to the requirement include government carriers, tire dealers with fewer than 1500 tires, and recap shops with fewer than 3000 tires. Refuse haulers are required to obtain a permit if they carry more than 9 tires.

Activities of the program are mainly concentrated on cleanup of large tire piles, which constitute a significant health and fire hazard. Cleanups have occurred so far in Deshutes County, Redmond, Polk County and Klamath Falls. Currently, DEQ has not participated in community cleanup efforts. A point system for prioritizing abatement efforts and allocating necessary funds has been developed by DEQ. The point system gives a higher priority to cleanup of large piles.

⁴ Roles, responsibilities, recycling practices and regulatory recommendations for C&D materials are addressed in Chapter 3, Special Waste.

■ Metro

Through the solid waste planning process, Metro has taken steps to identify the issues associated with illegal dumping by providing coordination and a forum for state and local agencies and concerned citizens to discuss the issues and develop broad solutions. Enforcement of illegal dumping regulations and nuisance codes is a function of local governments, therefore Metro can only assist in this area if enforcement and penalties are coordinated throughout the region.

Metro's direct roles are to:

- Mitigate litter problems at solid waste facilities. Metro currently has contractual provisions to minimize litter in solid waste facility impact areas for Metro facilities. Metro will continue this emphasis at Metro-owned facilities as well as enhancing language in franchise agreements with non-Metro facilities to assure that all solid waste facility impact areas in the region are addressed.
- Continue to provide education and promotion of proper solid waste reduction, disposal and recycling practices.
- Continue to assist with funding local government and citizen group community cleanup efforts. Metro budgets for assistance with cleanup of illegal dump sites each fiscal year. Metro should continue to respond to illegal dumping through this mode.
- Support legislative actions to increase penalties and provide for civil penalties for certain violations.

Metro's potential roles are to:

- Establish a process for a regional hearings officer if all local governments agree to a coordinated enforcement standard. Metro can effectively reduce the work load of local justice systems by providing a regional hearings officer to handle illegal dumping violations.
- Develop a model regional enforcement code. Local governments presently address illegal dumping violations through a variety of means. The City of Portland works through its bureau of buildings, Washington County through its Health Department, and Clackamas County through a solid waste department. If regulations concerning illegal dumping were developed in a consistent format, it follows that enforcement would be more consistent. Metro has had success in developing model ordinances for issues of regional concern. Developing a model illegal dumping enforcement code would be an appropriate role for Metro.

- Analyze the various refuse collection options, their cost, efficiency, impact on illegal dumping and potential for recovering lost system revenues. Alteration of solid waste collection service is a potential solution to mitigate illegal dumping. ORS gives authority to cities and counties for establishing the level and character of collection service; Metro could perform this analysis in order to provide cities and counties with a factual basis from which they may consider adjustments to their collection services.

■ *Local Government*

Local governments are directly affected by illegal dumping; they respond to complaints, identify sites, provide crews to clean sites and pay or recover the costs. Recommended local government roles are to:

- Continue to enforce illegal dumping through local nuisance codes. Until a model enforcement code is developed by Metro and adopted and implemented by local governments, cities and counties need to continue to identify dump sites and prosecute violators.
- Support and adopt a regional illegal dumping ordinance with enhanced enforcement standards and consistent penalties.
- Support legislation to increase penalties for illegal dumping and impose civil penalties for certain illegal dumping violations.
- Continue to provide waste reduction and recycling educational and promotional information outlined in local government waste reduction programs. Increased recycling and waste reduction programs should reduce the overall amount of illegal dumping. continued education and promotion will help to achieve these goals.
- Initiate further mitigation efforts. As part of the waste reduction programs for local governments, cities and counties are providing some portion of an FTE to focus on solid waste and recycling issues. The person in this position could provide a valuable link between nuisance abatement and waste reduction efforts through coordinated information and facilities.
- Enhance efforts to license or regulate "handyman" haulers. It has been demonstrated through investigations by the Port of Portland that part-time "handyman" haulers contribute significantly to illegal dumping. Regulation would ensure that such haulers will use appropriate means of disposal. The City of Portland intends to address this problem through current development of franchise agreements. Their method of addressing the problem of "handyman" haulers may serve as a model for the rest of the region.

■ **DEQ**

DEQ can affect illegal dumping through existing programs, such as the Waste Tire Program, which is up for reauthorization in 1990-91 legislative session. This program can be expanded to provide funding and assistance with community cleanup efforts for a what constitutes a major factor of the illegal dumping issue.