AFS Policy Statement #11:
Beverage Container Legislation
(Abbreviated)

Issue Definition
Everyone has at one time observed an empty can floating in a favorite lake or stream. This refuse does not pose any immediate harm to the aquatic environment, but it violates our aesthetic senses; somehow you really didn't quite "get away from it all." Aesthetics contribute a major part of what we find desirable about the sport fishing experience. While aesthetic impacts cannot be quantified as rigorously as toxic wastes, these impacts are certainly real even if less tangible.

We live in a consumer oriented society and one of the drawbacks of this society is the problem of disposing of the residues of that consumption. Litter and solid waste issues have received heightened public visibility in recent years because of the increase in litter, rapid filling of landfills and accompanied surface and ground water pollution, and difficulties in siting new landfills.

One solution, although somewhat controversial, has been container deposit legislation. This legislation encourages recycling and reducing litter by requiring a deposit, usually $.05 or $.10 on each beverage container sold to consumers, which is refunded upon return of the container. Enactment of container deposit legislation requires a decision to penalize those who carelessly dispose of empty beverage containers. Legislation of this type allows the individual to retain freedom of choice and is aimed only at those who choose to pollute. Incentives of this nature have an immediate and direct effect on individuals and require a minimum of governmental intervention.

Container deposit legislation has met staunch opposition from affected industries because of purported cost increases, job loss or dislocation, and differing opinion as to the amount of litter reduction to be experienced. There are many different types of litter found along our streams, lakes, rivers, and roadsides. Beverage containers, primarily for soft drinks and beer, compose a large percentage and are the types of litter usually controlled by container deposit legislation. Materials used to produce such containers include glass, plastic, and metal (primarily aluminum or steel).

Container deposit legislation has been proposed as a means of reducing the one way flow of materials that starts with extraction of resources from the earth and ends with burial in a landfill. The presumed benefits of introducing recycling into this process is the reduction in pollution and energy usage associated with the extraction and manufacturing processes as well as reduction of the rate at which waste is placed in landfills (Sullivan 1978). Recycling will reduce the overall need for natural resources. But, recycling will incur additional costs.

Several states have monitored the effects of container deposit laws. Prior to enactment of container legislation, Michigan observed that the number of beverage cans found along roadsides increased from 69 cans per mile in 1968 to 176.5 cans per mile in 1978. Since

enactment of their beverage container law, Michigan has experienced an 83% decrease in the number of regulated containers in litter counts (Special Joint Committee to Study the Impact of the Beverage Container Deposit Law 1980). Vermont has monitored litter since passing a container law in 1973. They report a 35% reduction in total litter and a 76% reduction in beverage container litter. Oregon found a 39% reduction in total litter, and an 83% reduction in beverage container litter since their law went into effect in 1972. Overall, the states report a reduction of 35% to 56% in total litter, and 76% to 83% in beverage container litter. These data are in agreement with a 1980 General Accounting Office (GAO) estimate that 80% to 90% of beverage containers are returned when container laws are in effect (U.S. General Accounting Office 1980). A number of sources have indicated container legislation results in a 6% reduction by volume in solid waste disposal in landfills. Reduced need for landfills lessens problems commonly associated with these sites, such as run off and leachate generation and also preserves options for land use, which include maintenance for fish and wildlife.

The need to conserve energy and natural resources in the U.S. and Canada has been used as support for arguments, both pro and con, in debates on container deposit legislation. The beverage and disposable container industry claims that refillable containers will increase fuel consumption of vehicles used to distribute beverages because of more frequent two way trips as well as the need for more vehicles; refillables are heavier and require more storage space. In addition, it is claimed that emptying and refilling operations would be slow and lead to increased energy and water consumption. The GAO looked at consumption through all manufacturing stages, from mineral raw materials to final product distribution. They found that recycled aluminum cans and 10-trip refillable bottles required about one-half the amount of water as that of one-way bottles. Energy-generating facilities and fossil fuel mining continue to be among the largest industrial users of our fresh water supplies. The aluminum industry has frequently advertised that recycling aluminum cans saves 95% of the energy needed to manufacture a new can, starting with the extraction of aluminum ore. New York and Michigan estimate energy savings at 11 to 26 trillion and 9 trillion BTU's. Regardless of the absolute amount of energy saved, it is widely accepted that lowered energy usage provides economic as well as environmental benefits.

Most conflict surrounding container deposit legislation involves pricing, jobs, and capital costs. The beverage industry has maintained that considerable capital cost would be incurred by an increase in the use of refillable beverage containers. For example, bottling lines and bottle washers would have to be purchased and housed, requiring capital and additional space. Actual capital costs depend on the final container mix chosen by the beverage distributors as a result of legislation (refillable bottles, recyclable cans, nonreturnable containers). New York estimates that capital costs approached $286 to $354 million for the changeover to refillables. Initially it was claimed that the changeover in New York also would result in significant job loss. Although some specific jobs were eliminated, New York estimates a net gain of 5,000 to 6,000 jobs. In Michigan there were job losses in the can and glass manufacturing industries and job gains in the bottling, distribution, and recycling industry, resulting in an overall gain of approximately 4,500 jobs.

Additional costs incurred with container deposit legislation also are borne by retailers. None of the states with container legislation have identical regulations, but the tasks demanded of the retailer remain essentially the same. Retailers must supply additional space, collect and inventory returnables, absorb increased labor costs, and maintain sanitation (American Iron and Steel Institute 1981). However, retailers recognize that returnables guarantee increased customer traffic because customers claiming refunds means more frequent customer visits.

There are alternatives to container deposit legislation that some states have initiated to control litter. Industry in general finds these alternatives more palatable. The first and most commonly cited example of such alternative legislation is Washington's Model Litter Control Act of 1971. The Act has several elements designed to control litter: mandatory fines for those caught littering, a broadly-based tax levied on a variety of items including food and groceries (taxes collected are redirected to litter collection and recycling activities), a litter education program, and a litter collection program that provides jobs to a summer youth corps. Aside from the tax, the program is voluntary. New Jersey took a slightly different approach by charging a landfill tax, which is turned back to communities that participate in the recycling program.

The main drawback recognized in these programs is lack of monetary incentive to consumers to return containers. Program effectiveness depends on voluntary efforts. Also, the taxes are non-specific and regressive. The Washington litter tax is levied on food, groceries, and other products, yet these products contribute to a minor portion of litter. Recycling centers accept only specific kinds of recyclables. And, finally, everyone pays for the pollution control program, not just the polluter. Nine other states have adopted litter tax laws; in five of those states the laws have been abandoned.
One other approach is source separation used on the community level; it has yet to be attempted statewide. The rationale of source separation is to entice the consumer to divide solid waste into a recyclable portion, which will be collected and taken to an appropriate processing center, and a non-recyclable portion which will be placed in landfills. An advantage of this system is that "curbside service" is possible. Source separation probably would be met with acceptance by both sides of the container deposit issue. But source separation and container deposit laws can be developed as complementary programs, providing a means for strong litter control.