patible. At the same time, we see the preservation of unspoiled natural areas as a major factor in pollution abatement. Watershed management is an inherent benefit from national parks, national forests, and wilderness areas. Yet the trees have been removed from enough American mountainsides to demonstrate the direct relationship between forests and not only an adequate layer of topsoil, but also the existence of a stable water supply.

But at this point in history, it is too late to depend on any vast reforestation program to reverse the pollution trend. We must expand governmental programs at all levels so that water purity can become

the measure of an advancing American society.

The committee deserves commendation for the attention being given to all facets of the water pollution problem. The Sierra Club supports the principles of proposals now before you to accelerate construction of waste treatment works, to curb pollution of water sources by oil, and to control acid or other mine pollution of watersheds and drainage areas. We urge prompt action.

Thank you.

(Prepared statement of Lloyd Tupling follows:)

STATEMENT OF LLOYD TUPLING, WASHINGTON REPRESENTATIVE, SIERRA CLUB

WATER POLLUTION AND SCENIC AREAS

Mr. Chairman and members of the Committee, one of the anachronisms of history is that the level of a society's cultural and economic advancement can be measured by the degree to which man has contaminated his potable water supply. The Seine, the Thames, the Hudson and Potomac are mute evidence of this tragic fact. The high degree of pollution is all the more difficult to understand when we realize that the total supply of water available for the world's need has not changed measurably since the day of creation.

The Sierra Club is particularly concerned about the impact of pollution on scenic areas. It goes without saying that polluted water and scenic grandeur are mutually incompatible. At the same time, we see the preservation of unspoiled natural areas as a major factor in pollution abatement. Watershed management is an inherent benefit from national parks, national forests, and wilderness areas. Yet the trees have been removed from enough American mountainsides to demonstrate the direct relationship between forests and not only an adequate layer

of topsoil, but also the existence of a stable water supply.

Hydrographic studies have shown that, where 75 per cent of Western range land was covered with trees and plants, water runoff was 2 per cent of the amount of rain falling each hour. Soil loss under these conditions amounted to only about 5 per cent of a ton on one acre in an hour. But where a mere 10 per cent of the land supported trees and shrubs, 75 per cent of the rain ran off each hour, carrying with it tons of soil and thereby complicating water treatment problems.

The ax and chain-saw take a toll on purity of our water supply while untreated industrial and municipal wastes pour into our lakes and streams. But at this point in history, it is too late to depend on any vast reforestation program to reverse the pollution trend. We must expand governmental programs at all levels so that water purity can become the measure of an advancing American society.

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tion of watersheds and drainage areas. We urge prompt action.

In conclusion, I wish to include in the hearing record the text of the water pollution abatement policy statement adopted by the Board of Directors of the Sierra Club on May 4, 1957. This statement serves as the basis for the Club's support of water pollution control programs over the years. The text follows: