Sept. 1, 1961

Mr. Stuart L. Udall
Secretary of the Interior
Washington, D.C.

Dear Mr. Udall:

The purpose of this letter is to call the attention of your Department to the advanced and continuing deterioration of one of America's and the world's most unique and beautiful natural formations. This is the area known as the Bonneville Salt Flats of Utah (see USGS topographic sheet "Tooele, Utah," MK 12-10, 1:250,000 series).

Under optimum conditions this area contains about 175 square miles of hard, crystalline, snow-white salts. The thickness of this huge slab ranges from about four feet to three inches where, at the edges, it abruptly feathers out onto the surrounding and underlying clay. With its backdrop of surrounding mountains this is one of the most beautiful desert areas in the world. It ranks aesthetically with, for example, Jackson Hole, Wyoming. It serves more than aesthetic uses.

It is the only known site in North America where attempts can be made in relative safety upon the World's Land Speed Record. Until recently it was the only such site known to exist in the world. Since Sir Malcolm Campbell's successful attempt in 1935 all attempts on the LSR have been made at Bonneville. Since that time this natural speed course has been used for testing purposes by major firms in our automotive industry. It has been used by a great many challengers of recent International Records. For 13 years it has been the site of the world-famous Bonneville National Speed Trials.

This area has another practical use. Early in World War I, when the nation was without sources for potash, the Solvay Process Co. constructed a pioneer potash-processing plant at Salton Station, in this area. The mining technique consisted of pumping brine from the vast water table which then lay under the salt. This brine was pumped through a series of evaporating ponds, about 75 per cent of the original water and sodium chloride being used, leaving a feed for the refinery of about one third and a residue of sodium chloride; the latter is waste.

The initial operation was not a financial success and was abandoned after World War I. In 1935 new capital became interested in exploiting this resource and a new potash-processing company was formed under the name of Bonneville Ltd.

Meanwhile, fabulous surface deposits of potash-sodium chloride had been discovered and developed in New Mexico. Although Bonneville Ltd. was a relatively small producer in the new domestic potash industry it showed a profit and continues to operate.

The natural beauty of the Salt Flats and their suitability as a safe, high-speed automotive racing and test course depends upon moisture, in the form of precipitation and water table. Two processes are involved:
First, when precipitation and runoff inundate the salt, the fresh water takes surface salt into solution and tends to erase the rough irregularities caused by expansion of the crystalline salt during the balance of the year. As this brine evaporates a fresh and immaculate salt surface is created, healing previous flaws and renewing itself annually.

Second, solar heat apparently causes the water table of normal years to rise to the surface daily during the warm season. As this exposed brine evaporates it deposits fresh salt on the surface, aiding the constant renewal process.

In the absence of these forms of moisture the salt cannot renew its surface as it has done during recent geologic time. The water table normally fluctuates between surface level and about four inches below the surface. It is now about four feet below the surface, there have been many years of drought and, in the absence of spontaneous regeneration the Salt Flats have degenerated deplorably and alarmingly.

Their condition was so bad this year that two Land Speed Record attempts had to be cancelled (fortunately, Donald Campbell already had decided not to come) and it was even doubtful that a usable short course could be prepared for the Bonneville National Speed Trials. If the present trend continues the speedway facility may be rendered totally useless and the possibility of an American or anyone else setting a Land Speed Record on American soil will end. Meanwhile, Australia and the USSR are developing such natural speedways. Others, rips for development, exist in Latin America.

Nothing, of course, can be done about the lack of precipitation in this area. Measures can conceivably be taken, however, for the conservation of the water table under the Salt Flats. I do not have Bonneville Ltd.'s current figures but I was told by their superintendent in 1954 that each year, for about 100 days in the summer, the firm pumped between 25,000 and 30,000 gallons per minute for 24 hours a day, for a total of about ten to eleven million tons of brine annually. To illustrate the magnitude of this operation, the firm calculated that artificial evaporation of the amount of water involved would require the consumption of between 3000 and 4000 tons of coal each day of the year.

The lowering of the water table became apparent in the early 1950's. Even Bonneville Ltd. was forced to deepen its brine wells. This year, to catch up with the receding water table, the firm has dredged a drainage ditch for a great many miles across the Salt Flats. I am told that the ditch is to go to a depth of 20 feet. This should drain water from under the salt for miles around. If and when a good season of precipitation comes along it would not be surprising if this vast canal minimizes its beneficial effect upon the surface salt.

The speedway area of the Salt Flats is a great tourist attraction, an important source of revenue to Utah and a source of international fame to Utah and to the US. Its use is administered by the Bonneville Speedway Assn., a non-profit corporation associated with the Salt Lake City Chamber of Commerce. BSA holds long-term leases on the land involved from Bonneville Ltd., the State of Utah and the Federal Government, including your Bureau of Land Management. BSA has minimal funds with which to work and its modest qualifications for its task have been questioned repeatedly by many experts in industry and in the field of top-flight auto-motive competition. BSA has no specific program or timetable for attempting to salvage what is left of the speedway facility other than waiting for rain. The longer the wait and the lower the water table recedes the less there will be to salvage.
Arkansas officials have, however, mentioned one possibility. This is the echo of a proposal made in the late 1930's by Ed Lamus of the Utah Road Commission and donations of $5000 each were promised the project by Arthur Fillebury of the American Automobile Assn., Sir John Cobb and Capt. George Eyston. The plan consists of digging two parallel ditches and dikes about 20 miles long. Brine pumped from the ditches would flood the area between the dikes and evaporation would deposit fresh salt on what would be the world's longest speed course. This would simply be duplicating what Bonneville Ltd. has done for years on an area 4000 feet wide by ten miles long. It would take some careful surveying and terrace control. It would take funds and leadership and a water table that is not drastically depleted.

I therefore respectfully suggest that your Department give consideration to the future of this treasure of nature. I and many of the sport-and industry-connected individuals most involved would prefer to see this facility administered dynamically and progressively on the State or County level rather than on the Federal level. But funds and leadership are essential and these may not be easy to find from a Federal source.

The opinions expressed here are by no means only my own. I have merely chosen the unpopular task of bringing to light a controversial subject which has long been suppressed. Many others will support me.

Thank you for your attention.

Sincerely,

GRiffith Borgeson
1332% Miller Drive
Los Angeles 46, Calif.
Oldfield 4-0049

GB/ut
cc: Mr. George Dewey Clyde, Governor, State of Utah.

PS: This is to appear as an Open Letter in CAR & DRIVER magazine, One Park Avenue, New York 16, N.Y.