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CURRENT STATUS AND PROJECTED FUTURE OF THE TRONA INDUSTRY OF SOUTHWESTERN WYOMING

Green River Basin mines and refining plants (Figure 1) are now supplying over 60% of the industrial soda ash used in the United States of America. Growth has been continuous in the Wyoming trona industry since its inception in 1950 (see Figure 2).

For every ton of crude trona ore mined, about 1200 pounds of refined soda ash are extracted. During 1974, about 4,500,000 tons of soda ash were manufactured from the 7,604,445 tons of crude trona mined in Wyoming. The market price of Wyoming soda ash is now over ^{\$55/ton (1977)} \$40 per ton at the mill. The value of Wyoming's 1975 soda ash production will probably exceed \$200,000,000.

Large additions to productive capacity have been under construction at the FMC and Allied Chemical operations during 1975. Texasgulf Inc.'s new mine, the fourth in the district, will come into production about August 1, 1976. When these projects are complete, Wyoming productive capacity will be a little over 7,000,000 tons of soda ash per year. The mines will be capable of supplying almost 90% of total domestic consumption (see Table 1).

The total consumption of soda ash in the United States increases by about 3-4% annually. The growth in Wyoming production has, of course, been more rapid, and has been made possible by declining production from synthetic soda ash plants in the Eastern United States. The decline of the synthetic or Solvay process has now been accelerated by increased fuel costs, shortages of anthracite coal and coke, and by increased concern about the water pollution produced by these plants. Trona mining gained an additional economic advantage in recent months when Congress passed a bill giving a more liberal application of terms of the mineral depletion allowance as applied to trona.

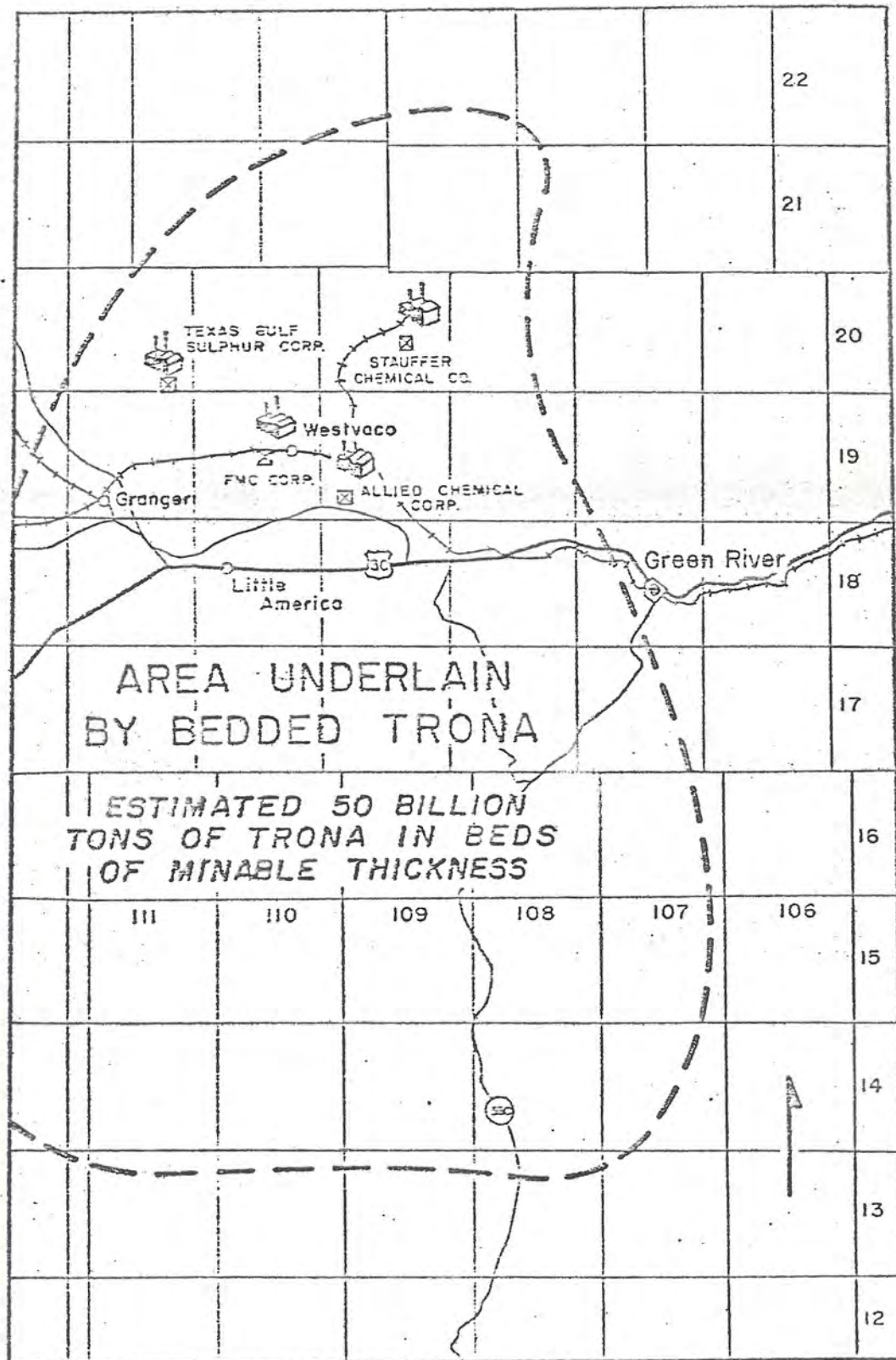
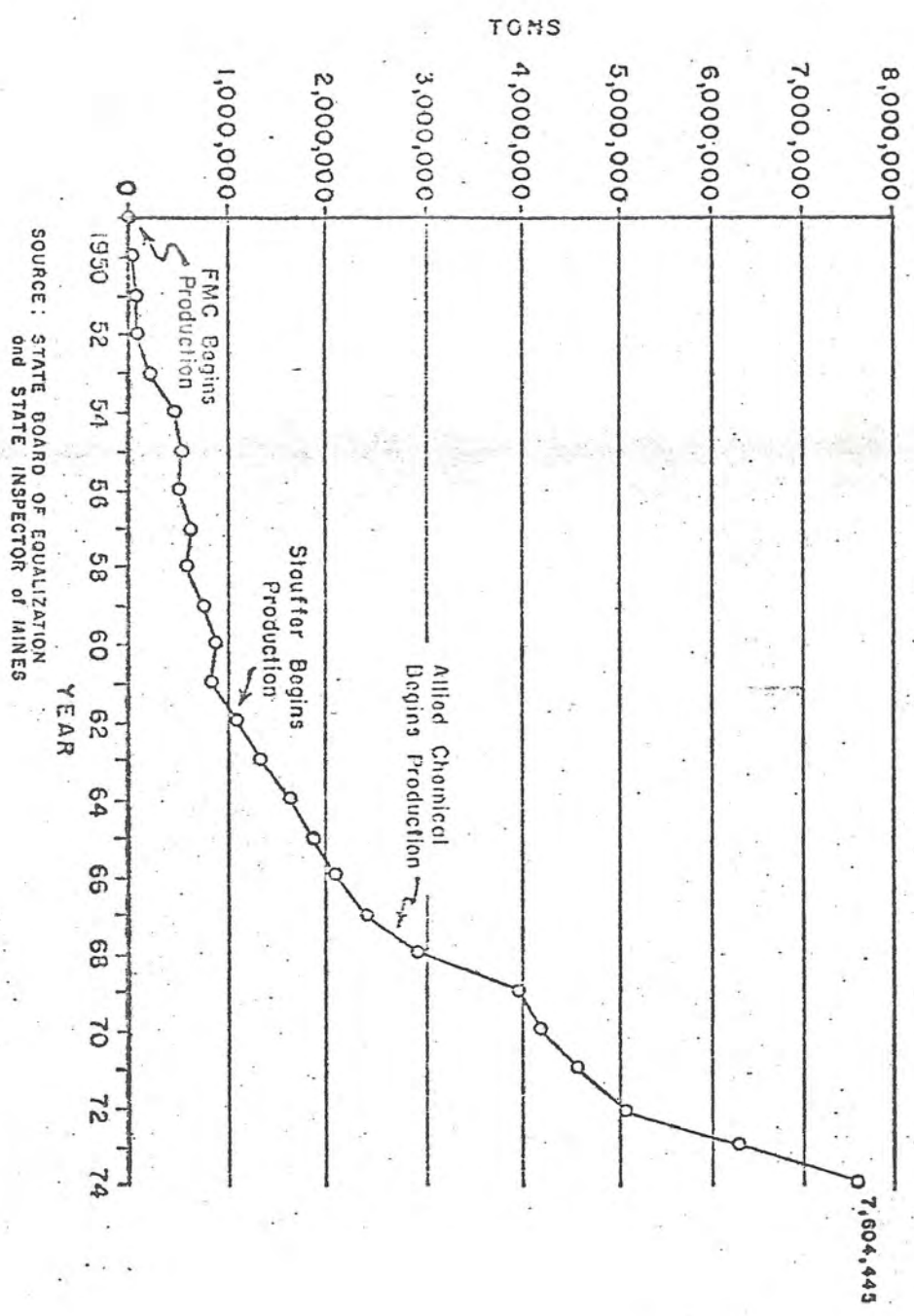


FIGURE 1

Trona Production by Year Crude Ore



SOURCE: STATE BOARD OF EQUALIZATION
and STATE INSPECTOR of MINES

FIGURE 2

Under the new law, trona mining companies are now allowed to use the full value of the soda ash extracted as a basis for calculating percentage depletion allowance. That is, they are allowed to consider all milling and processing as a part of the mining function and apply a percentage of the value of the final product as a Federal tax deduction.

As the Green River Trona Mining District will almost totally dominate United States soda ash production by 1980, growth in the mine capacity will then slow to a rate approximating the growth in soda ash consumption (estimated at 3-4% per year). This stabilization should occur when Wyoming soda ash production approximates 7,500,000 tons per year, in the early 1980's. At that time, productive capacity will be about 40% larger than current levels.

According to the last report of the State Inspector of Mines, 2,651 people were employed in the trona industry in Wyoming in 1974. Another 2000 people were employed in new construction in the District during the year. As a point of stabilization is approached in the early 1980's, the numbers of construction workers coming into the area will decline and the industry work force will probably be in the range of 3700-4000 people. This is a very tentative estimate, based only on current employment and on anticipated growth in mine and mill output.

In summary, soda ash output and industry employment will continue rapid growth into the early 1980's and then settle into a trend of much slower but steady expansion directly related to overall population growth and industrial development in the United States and development of new export markets.

Wyoming Ad Valorem and severance taxes are collected on the value of mined trona ore prior to processing. For the year 1974, production was valued at \$33,537,931 for state and county tax purposes. This compares with a probable market value of over \$140,000,000 for the refined soda ash produced from this ore.

There is now an obvious conflict between Federal and State methods of calculating the value of the mined trona for tax purposes. For the purposes of Federal percentage depletion allowance, companies consider processing and refining as a part of the mining process. For state and county taxation, however, the mining process is considered to end at the mine mouth, and a value is calculated for the crude trona ore, though none is ever marketed in this form.

Taxable valuation of trona production would more than quadruple if State valuation practices were made to conform to the new Federal definitions for "mining and processing of trona".

Forrest K. Root
Staff Mineral Geologist
Geological Survey of Wyoming
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TABLE 1

<u>Company</u>	<u>Present Productive Capacity Millions of Tons Crude Trona Per Year</u>	<u>Increases in Capacity Under Construction</u>
FMC	3.0	1.2
Stauffer	2.8	
Allied Chemical	3.6	
Texasgulf		1.8 (8-1-76)
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TOTAL	9.4	3.0