

NEW MEXICO SHOULD CONCENTRATE ON ITS NATURAL
ADVANTAGES IN ECONOMIC DEVELOPMENT

Jack Lacy^{1/}

When a man travels by air across New Mexico he can see the crests of the Rockies until the mountains drop from sight in Colorado and Wyoming.

As you look East, you can see the plains stretching alongside the mountains from horizon to horizon.

But if you look for other men, you will see them clustered, as at an oasis, in communities that lie along the slopes of the Rockies from Montana to Mexico.

In this area of the Rocky Mountains and the Great Plains, man has confronted the forces of nature with practically no comprehension of their meaning for his life, and his adjustment to the realities of his environment has been seriously incomplete.

For the central fact is that the area is in a partially developed, semi-arid hinterland, while for the most part the local human settlements have borrowed their ways of life from quite different environments...from the humid East Coast, the interior manufacturing areas, the corn belt, and the agricultural South.

This borrowing has made the internal workings of these communities very similar to cities in the rest of the country. Traffic entanglements, frustrated planning efforts, housing congestion and zoning inconsistencies are common problems in most cities.

But the impact of the semi-arid environment has posed special difficulties and suggests distinctly different solutions from those relevant to other parts of the nation.

In the mountain-plains area men faced periodic shortages of water, but doggedly planted heavy green lawns and water consuming trees, preferring to consider wet years as normal years. They largely ignored the splendid building materials of the area (rock and earth) and erected wooden houses which are blasted by sand and wind.

We do not assume that man, like a chameleon must assume the coloration of his surroundings. But we assert that the natural forces of the mountain-plains area are extremely powerful, and a failure to accept their restrictions as well as their opportunities will cause continuing distress. The efficient use

^{1/} Director, Department of Development, State of New Mexico.

of water, for example, is indispensable to sustained population growth in the area.

What sort of adaptations and inventions, then, might permit the most efficient use of the physical and human resources of the area?

The Civic Design Study recently completed research, done under a Rockefeller Foundation Grant at Colorado College, set about to answer some of these questions.

The answers are predicated on the assumption that certain conditions in the mountain-plains area are likely to continue for some time. These conditions include a continued rapid growth of population and continued water shortages.

Their suggested solutions fall into two major categories:

1) For optimum future development, the mountain-plains area should concentrate on its natural advantages and natural resources as a specialized service and recreational area for the rest of the nation.

2) The area should serve as a model for the advancement of other semi-arid regions of the world and as a laboratory for experiments in living designs for these other regions. What we do to develop the mountain-plains area will be watched with great interest by such places as Africa and the Middle East.

The arid or semi-arid feature of New Mexico is not unique to our particular State. It is a feature shared, incidentally, by over three-fourths of the world's land area located in the same latitude belt. Strangely, many writings about the history, law, economics or literature of the region have tended to ignore the fact of aridity or to discount its importance.

Most of the water available to the area falls in the rugged mountains, where it cannot be used effectively. Even if the mountain water can be used, there is the problem of transporting it effectively to the places where it may be used. The largest water users are the cities and the farming regions east of the Rocky Mountain water basins.

To move the water from the mountains to the plains, it must be transported through a complex of trans-mountain tunnels and aqueducts, stored in reservoirs and then distributed through pipes and ditches to the cities and farms.

The expense of this gigantic supply system is almost prohibitive.

Only through the massive infusion of federal government funds have some of the most important projects been possible.

Moreover, Congress has frequently balked at further support of water diversion projects because more water in the farm fields means more farm crops. More farm crops mean bigger surpluses, and the political dilemma is compounded rather than resolved.

Litigation continues as dehydrated cities raid the mountain slopes in search of additional water.

Added to the problems of competition is a foreseeable upper limit on the available water. The United States Select Committee on National Water Resources estimates that by 1980 the four major river basins involved in the mountain-plains area will be developed to their maximum extent.

As with the use of land when the frontier was closed, any new water using activities will then be possible only at the cost of other water consumers. Who then, will give in? When the question arises, most eyes turn nervously but ominously to the greatest water consumer of all, the farm and the water then becomes its most valuable resource.

One partial solution may lie in the more efficient use of existing water. Cities can do substantially more to re-use water to cut runoff to a minimum. The farms may benefit from further exploration into ground water prospects or from scientific breakthrough in the desalinization of water. But the weight of the evidence indicates that better administration and technology will only mitigate and not resolve the basic issue of water supplies.

It is only natural that residents of the mountain-plains area want to have the same kind of economics that have brought prosperity to other sections of the country.

This is why we so many times find our efforts leading to the dubious conclusion that what will work in Syracuse, New York, will work in Santa Fe, New Mexico.

Barring radical shifts in population trends in the mountain-plains country will expand population two to three-fold by the year 2000. Too often the assumption has been that the kind of economy that has supported growth elsewhere will support this anticipated growth on the mountain-plains.

But evidence is that there are environmental impediments to certain kinds of economic activity in the area.

The potential instability of so many parts of the economy has thus led some observers to the conclusion that industrial development is the most satisfying answer to the call for economic prosperity.

New industries bring in new people with big payrolls. The people need places to live; new houses, new stores, and new service to follow naturally.

Lured by this enchanting prospect, delegations from mountain-plains cities have roamed the nation in search of restless business.

In the short run the reticence of industry to throw its lot with the mountain-plains cities is partially explained by the excessive distance of the area from the major markets of the country.

And, despite the wealth of natural resources which have been extracted from the area, the heavy manufacturing industries have always sought to build up their business in close relationship to heavy eastern consuming centers. The present expansion of industry to the West Coast and the Gulf Coast follows the pattern of this relationship to population and marketplace.

In addition, land-locked hinterlands with unnavigable rivers suffer from the lack of cheap water transportation. Further, freight rate discrimination and an inadequate skilled labor force tend to hamper industrial development.

Hovering over these short-run factors is the long-run spectre of inadequate water supply. Industries requiring huge quantities of water are reluctant to settle where their most essential commodity may be depleted over a period of years.

Certain industries--the so-called "clean" industries such as electronics and aerospace firms--have found the mountain-plains much more compatible with their interests.

Water supplies and freight differentials are not so crucial in light industry, and the employees of such firms enjoy living in impressive mountain surroundings.

In spite of the obvious difficulties in the regional economy, the growth of the area is unmistakable.

New Mexico with its thirty-nine percent population increase in the last decade ranks seventh place in the nation's growth and enjoyed comparable jumps in prosperity.

But the central question is this: Will the residents of the region expend their energies in search of industries which pose difficult problems in this kind of environment...or will they listen to the dictates of their land and pattern their economic livelihood in a way which recognizes the realities of water, weather, and geography?

The environment sets fairly narrow limits on large-scale industrial development; however, certain industries are highly suitable to the area. These are the high-cost, low volume industries such as production of electronic equipment and advanced scientific research centers.

A beginning has been made in establishing businesses of this sort, but the surface has barely been scratched.

These enterprises tend to hire personnel with more education, at a higher rate of pay than heavy industry, and such people demand expensive cultural facilities.

At the same time we must continue exploration and development of minerals and recreational resources.

Despite the 600,000 acre feet of water being developed in the San Juan-Chama area, and another 200,000 acre feet expected to be available through the Canadian River development which was started by the construction of the dam at Logan we should never expect New Mexico to be the location of heavy industry demanding tremendous quantities of water. These new sources of water supply will serve as insurance to serve the human needs of an ever-growing population which will continue to boom and grow on the basis of selective industrial development and recreation expansion.

Never forget that our State has been growing at the rate of 27,000 per year, based on gains from 1950 to 1960 and we have no reason to believe this has changed.

This means we will pass the million population figure by the end of this year 1962, and by 1970 we will count nearly a million and a half persons living in the Land of Enchantment.

The demand for municipal water and recreational will be ever-increasing and these demands are being met by the far-sighted planners, engineers, and law makers who have carefully put together a continuing program to keep pace with growth.