

Dec. 15, 1960

Report to ~~President of the Trinity River Authority~~ Kennedy - Johnson
National Resources Advisory Committee
~~Appointed member of the Committee~~
The Water resources of

I am limiting my report to the Trinity River Basin of Texas, and the Red River Basin lying between Texas and Oklahoma. If the Committee wishes further recommendations and reports on other basins I can supply this information in some future report.

Perhaps one of the most important segments of the Texas area lies within the confines of the Trinity River Basin. Here we have a stream originating in North Texas and flowing in a southerly and southeasterly direction to the Gulf of Mexico and intersecting the Intracoastal Canal. Five hundred miles above the mouth of the river is the Dallas-Fort Worth metropolitan area containing a population of 1,629,000 ^{at present and by the year 2000 Dallas City alone can expect a population of 2,500,000}. Immediately above its mouth and slightly to the west ^{of the Trinity} is another large metropolitan area of Houston, containing approximately 1,236,700 population. The Trinity River Basin has a population of 1,800,000.

The Trinity River is navigable at the present time up to the City of Liberty, Texas. The Corps of Engineers has under study the navigation benefits that would accrue if such navigation was extended to the cities of Dallas and Fort Worth.

I was Chairman of the Subcommittee of the House Conservation and Reclamation Committee in the Texas Legislature at Austin which handled the passage of the Trinity River Authority Bill in 1955, and I have seen the benefits that have stemmed from this constructive legislation that has occurred since its creation.

The entire Trinity River Basin of about 18,000/square miles is dependent on the water resources of the Trinity River for their future development. In addition, the Trinity River Authority in collaboration with the City of Houston is proposing to develop a reservoir in the lower reaches of the Trinity River. One

of the key projects in the development of the water resources of this river basin is the salt water barrier project near the mouth of the river in Trinity Bay known as the Wallisville Reservoir project. The purpose of this salt water barrier project is to prevent the intrusion of salt water into the fresh water pool and it is important that this project be implemented as quickly as possible by the Federal Government with local interests contributing their pro rata share.

The Corps of Engineers now has under study the potential benefits of navigation that would be available if this feature could be constructed in the near future. It is my personal belief, based upon a general knowledge of the area, that this report which is scheduled for delivery in 1962 will show one of the most favorable benefit-cost ratios of any project in our nation. Accordingly, I am of the definite opinion that all possible advance planning should be done on the navigation of the Trinity River from its mouth to the cities of Dallas and Fort Worth in order that the construction could be implemented as soon after the delivery of the report as possible.

In connection with the development of navigation on the Trinity River, I am reminded of the fact that pools for the conservation of water for navigation have already been created in existing Benbrook and Grapevine and that the plans of the Trinity River Authority, a map of which I am enclosing in support of this argument, reflect the construction of main stem reservoirs.

The main benefit of the Trinity River Authority reservoirs is the regulation of flows which will be available for navigation. With the planning that has been made, there is no doubt that there will be sufficient water available for navigation at all times, even during critical drought periods.

Pollution of the Trinity River is a problem similar to that of other

streams in the nation. However, much is now being done to correct this situation and it should be aided and abetted in every way possible.

There are four agencies within the state that have some influence over pollution of streams. They are: Texas Game, Fish & Oyster Commission, Railroad Commission, State Health Department, State Board of Water Engineers. Pollution caused from oil field wastes is being corrected in a number of places and it is my belief that this will continue. Where ever necessary this should have the support of the Federal Government.

However, the greater portion of pollution is caused by municipal wastes. The Federal Government program of grants in aid to cities to rehabilitate sewerage collection systems and treatment facilities has been most beneficial and a number of cities within the Trinity River watershed have taken advantage of this. The Trinity River Authority has sponsored pollution control to a great extent and has even constructed a central plant and collection system to serve the towns of Grand Prairie, Irving, Farmers Branch and a portion of the city of Dallas. This plant and its facilities can be expanded to serve a population of 800,000 in the intervening area between Dallas and Fort Worth.

The City of Dallas which is admittedly now contributing to the pollution of the river, expects to let a contract in the next few months to increase its sewage treatment facilities 100 percent. Furthermore, the city has already initiated studies on the construction of other sewage treatment facilities and will provide the necessary financial requirements to meet the growth of the Dallas area which is expected to be substantial in the next two or three decades.

Present Federal law is sufficient to take care of the pollution problems in the Trinity basin if the communities involved would plan and take advantage of the grants in aid that they are eligible to receive at the present time, if

they would accept their responsibility to reduce pollution.

At this point I wish to state that I favor the preservation of ownership of water ~~by~~ ^{and local communities} the state instead of the Federal Government. Certainly I do not favor the Federal Government taking over our waters. Whoever controls the water of a community controls the economy of that community, and certainly I believe that ownership should remain a local matter and I recommend that the Federal Government establish that policy of state and local ownership ~~where~~ ^{where the streams are wholly within the boundaries of a state}

The City of Dallas recently concluded studies of the water requirements for Dallas County up to the year 2000. New sources of water were investigated and were incorporated in such a report. One of the salient features of this report ~~calls~~ ^T calls for the construction of a reservoir on Elm Fork ~~of~~ ^K of the Trinity River upstream from the existing Garza-Little Elm project. Another calls for a similar reservoir on Denton Creek upstream from the Grapevine project. In the plans for these two reservoirs the city has been negotiating with the Corps of Engineers for an exchange of conservation water in the two existing reservoirs for flood control space in the two proposed new reservoirs. The interesting effect of this plan would be to increase the total yield from the drainage areas of Elm Fork of Denton Creek by 37 m.g.d. through the most critical drought period, a large part of which increase comes about by reason of reduction in evaporation losses which would otherwise occur if the two additional reservoirs were developed to their full conservation potential. I strongly recommend that the Federal Government participate with the City of Dallas in the exchange of space in these reservoirs.

The Federal Government has heretofore recognized the tremendous damage that has occurred from time to time by reason of severe flooding both in Dallas and Fort Worth and it has done a worthwhile job in improving the Dallas-Fort Worth floodways as well as constructing flood control reservoirs on Elm Fork ~~K~~ ^K, Denton Creek

and Clear Fork all tributaries to the main river. However, there is one remaining stream above Dallas that is uncontrolled -- Mountain Creek. This stream embraces a drainage area of 300 square miles and presently has no flood control whatsoever. I believe that a project should be undertaken on this stream not only for flood control but for such conservation as can be economically justified.

The development of the water resources in the Red River Basin is also of utmost interest to those of us working in the field of water development. Droughts plague the basin as they do in all of the basins in our area but the problem of growing concern is that of stream pollution. Reservoirs can be constructed to regulate the runoff that is available but the water cannot be used for municipal and domestic or many industrial uses unless the quality of the water is improved.

Salinity from oil fields and natural sources constitutes the greatest problem because of its wide occurrence and the technical and economic difficulties involved in its abatement. However, the great importance of ample supplies of water of good quality to future growth in the area make it mandatory that every effort be made to control pollution to the maximum extent feasible.

The Public Health Service of the U. S. Department of Health, Education and Welfare is making an extensive study of the pollution problem under a project entitled "The Arkansas-Red River Basins Water Quality Conservation Project". I urge that this project be carried to its conclusion and that the corrective measures found necessary be carried out. If pollution abatement is achieved, the Red River can supply a substantial volume of potable water to the Dallas-Fort Worth metropolitan area.

I have discussed water problems of these two basins with a great many people here in Texas before making this report. Several have suggested greater coordination of available information between the agencies of the government.

Others have said that the public should be furnished more information concerning water development and especially information concerning the pros and cons of barge transportation. They report to me that many people have a misconception that barge transportation requires a large volume of water. The plan of the Trinity River Authority is that water will be controlled in non-moving pools moving ~~down~~ stream only when there is the movement of a barge and its tows through a lock. As a barge moves down stream, a single release of a lock of water at the highest elevated lock will be repeated at each successive lock and, in effect, the same lock of water will be utilized over and over.

Dallas has grown until today it is the largest city in the United States without commercial water transportation. And the Dallas-Fort Worth metropolitan area is the largest metropolitan population concentration in the world without some sort of water transportation - with the possible exception of Mexico City. It is extremely important ~~that~~ ^{to} this area that the Trinity River Project by the U. S. Corps of Engineers be accelerated and carried out to completion at the earliest possible date.

JOE POOL - National
MEMBER of ~~the~~ Resources
Advising Committee

Att: (1)
~~Trinity~~ R. Res. Map