

APPRAISAL RATE ON PROPERTY IN AND OUT OF FLOOD DISTRICT EXPLAINED BY THE APPRAISERS

(BY EARL C. M'GAIN.)

Ever since the formation of the Pueblo Conservancy District and especially since the adoption of the official plan of flood protection, there has been considerable conjecture as to the amount to be assessed against property inside and outside the flooded district; the manner of determining appraisals and benefits; the distinction between the direct and indirect assessments, and similar questions.

Believing that the people are interested in these questions and their answers, and that by a proper understanding of the method of appraisal, they may be able to compute the assessments against their property even before the official appraisal report is filed, the writer interviewed Thomas Kelly, E. D. Spruill and W. D. Keen, the members of the board of appraisers, for the purpose of asking questions on the matter, of most interest to the people of the city. The questions and answers follow:

- Q. What will be the total cost of the flood prevention plan?
 A. Four million dollars.
 Q. How much time will be allowed to pay this?
 A. Time to be fixed by directors—not to exceed 30 years.
 Q. How will this amount be paid?
 A. One-half by indirect assessment against the city and county and one-half by direct assessment against the property in the flood district.
 Q. What is the estimated benefit to property in the flood area?
 A. A maximum of thirty-five per cent of the appraised valuation of property in the district, varying according to its location.
 Q. What is the distinction between direct and indirect benefits?
 A. Direct benefits are the benefits that will be realized by property directly within the flood area and subject to flood menace; indirect benefits are the benefits that will be realized by property in the city and county by protection afforded the city and county in general.
 Q. What will be the assessment against property outside the flood district?
 A. \$3.47 in city and 18 cents in county per thousand dollars valuation of property.
 Q. How will the benefits to property in the flood district be computed?
 A. By appraised valuation of the property, the depth of water to which it was flooded during the flood of 1921 and irregular conditions of flooding under which part of a property was flooded and another part was not.
 Q. How will the railroads be assessed?
 A. By direct and indirect assessment; their property in the flood district will directly be assessed for benefits. They will also be assessed indirectly for benefits derived by the city and county.

The conservancy act provides that the board of appraisers shall "appraise the benefits of every kind to all land and property within or without the district." Briefly stated, the benefit to a piece of property represents the amount that property would depreciate in value without protection, or appreciate with protection, or, as in some cases, the sum of both.

The first work of the appraisers was to ascertain the value of all property in the flood district, then to ascertain the benefit to be derived by this district as a whole from flood protection. It was the judgment of the appraisers, after careful consideration of all available data, that this maximum benefit was equal to at least thirty-five per cent of the value of the property as found by the appraisers.

Having determined thirty-five per cent as the general basis of benefits, it was necessary to determine for each individual piece of property whether it will receive the full or only a part measure of benefit.

Property flooded to a depth of one foot is not benefited as much as property flooded to a depth of seven feet. To determine benefits for city lots and their improvements, they were graded from maximum to minimum according to the following table:

Average Flood Depth in Feet.	Per cent of Maximum Benefit.
7.0 or more	100 per cent of 35 per cent.
6.5 inclusive to 7.0	98 per cent of 35 per cent.
6.0 inclusive to 6.5	95 per cent of 35 per cent.
5.5 inclusive to 6.0	91 per cent of 35 per cent.
5.0 inclusive to 5.5	85 per cent of 35 per cent.
4.5 inclusive to 5.0	78 per cent of 35 per cent.
4.0 inclusive to 4.5	70 per cent of 35 per cent.
3.5 inclusive to 4.0	60 per cent of 35 per cent.
3.0 inclusive to 3.5	50 per cent of 35 per cent.
2.5 inclusive to 3.0	40 per cent of 35 per cent.
2.0 inclusive to 2.5	30 per cent of 35 per cent.
1.5 inclusive to 2.0	20 per cent of 35 per cent.
1.0 inclusive to 1.5	10 per cent of 35 per cent.
0.5 inclusive to 1.0	4 per cent of 35 per cent.
Less than .5	0 per cent of 35 per cent.

The depth of flooding corresponds to average depth over the entire lot.

As regards irregular conditions of flooding, due to varying height of the land, the appraisers state: "The front portion of a lot, on which the building is usually located, is the more valuable part, and therefore will derive greater benefit than the remaining portion. The depth of flooding in buildings is taken into account in reducing the benefit only when the first floor was not flooded. In case a building occupies more than one lot, the entire area occupied, including the whole part of any lot partially occupied, is taken as a unit."

In order to determine the proper reduction from the full flood benefit to property only partially flooded, the following table has been used:

- Vacant lot, rear flooded, front dry, street dry, 80 per cent.
- Vacant lot, rear flooded, front dry, street flooded, 50 per cent.
- Vacant lot, one-half on side flooded, street flooded, 40 per cent.
- Vacant lot, rear dry, front flooded, street flooded, 30 per cent. (deeply) (lightly)
- Vacant lot, rear flooded, front flooded, street flooded, 10 per cent.
- Lot with building, rear flooded, front dry, street dry, 80 per cent.
- Lot with building rear flooded, front flooded, street flooded, 50 per cent.
- Lot with building one-half on side flooded, street flooded, 40 per cent.
- Lot with building, rear dry, front flooded, street flooded, 30 per cent. (deeply) (lightly)
- Lot with building, rear flooded, front flooded, street flooded, 20 per cent. (lightly) (deeply)
- Lot with building, rear flooded, front flooded, street flooded, 10 per cent.
- Property flooded to one-half on side flooded, street flooded, 10 per cent.
- First floor, rear dry, front flooded, street flooded, 10 per cent. (deeply) (lightly)
- First floor, rear flooded, front flooded, street flooded, 5 per cent.

Having determined the general methods for finding benefits, they found it necessary to compile the necessary data for each piece of property in order to arrive at its benefit. This data contained the following: name of owner; location; description; depth of flooding; an property.

The first three items, including the 1922 tax valuation, were taken from records at the court house. The detailed descriptions of the property, including kinds of buildings, condition and depth of flooding, was on sheets of engineers who examined each property. The value of the property was determined in each case, first, by real estate men, engineers and tractors working as inspectors in teams under direction of board members; and second, by the final determination of the board, after a specification of the property. In some cases, two teams of inspectors independently, as well as the board, made the appraisals. In a judgment of an expert architect was consulted to supplement the appraisers. Assessor's valuations were disregarded. In cases, the appraisers deducted 20 per cent from their appraised value of property before computing the assessment. This is a uniform de all property alike, this uniform deduction was made by the appraisers to eliminate any possible excess in valuation. A typical computation is as follows:

A lot with a building on the end fronting the street is partly on the front, but the water did not reach the first floor. Suppose of the land as \$2,500 and that of the building as \$10,000, a total of \$12,500. The table shows that such a property would have a partial flood reduction of 30 per cent, which, deducted from the total of \$12,500, leaves 70 per cent, the modifying factor. Suppose of the property was flooded to a depth of 2 feet, the modifying factor from depth of flood would be 30 per cent.

Now, remembering that all property in the district will receive a benefit of 35 per cent, the following computation may be made:

Remaining valuation,	Basic benefit,	Depth factor,	Flood factor
\$10,000	x .35 p ct	x .30 p ct	x .70 p ct, eq

Regarding the assessment of public utilities and railroads, the state: "Detailed inventories of these properties were prepared, state quantities and unit prices showing cost of reproduction new, at reproduction less depreciation, as of 1923, being submitted by the companies to assist in the preparation of the inventories. These were fully examined and passed on by the board after inspection of the property itself. To these values the same general principles and methods of benefits were applied as were used in the case of other property.

"In a few cases it was found that special conditions of construction location would to some extent modify the amount of benefit. In the case of water and gas mains, completely underground, the benefit derived from protection would be less than that of other property, for while all values depreciate in common in a flood menaced district, it must be that the pipes within the district also serve property outside the district which does not depreciate in like measure. A modifying factor is applied to underground pipes, street valves, underground telegraph cables and pole lines. Other special circumstances, which were given consideration in appropriate cases.

"After a careful consideration of the benefits to be derived by the city and county, the appraisers concluded that the city as a unit is entitled to at least an equal amount with the property to be assessed within it. In arriving at this conclusion the board considered the streets, sewers, bridges, street lights, etc., to be protected and their protection a duty of the city provides for the protection of property, public health, and the expense entailed upon the city by such protection is not afforded; and such kindred elements of benefit to the city as a whole.

"Where damage to any property results from the execution of a plan of flood protection, the amount of such damage was determined through inspection of the situation on the ground and a careful comparison of all available data relating thereto."

"The general tax from year to year of \$3.47 in the city and county per thousand dollar valuation is estimated on 1923 valuation rate necessary for the city and county to provide their approximate of the total cost of flood protection. On a basis which now pays valuation of \$2,000, this assessment would be \$7.25 per year.

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