

That the acreage each party to this suit is entitled to irrigate as hereinafter set forth was determined from statements of water users' claims duly filed in this case, from "Sevier River Hydrographic Survey Records," which are made a part hereof, from the records of applications to appropriate water from the Sevier River System on file in the office of the State Engineer, and from field investigations made by the State Engineer, his deputy and assistants during the years of 1922 to 1925, inclusive.

## VII.

It is recommended that for purposes of distribution the entire Sevier River Drainage area be divided into four zones, designated as zones A, B, C and D, respectively. The boundaries, rights and methods of distribution of each of the zones shall be as follows:

## Zone A.

This zone comprises the rights on the East Fork of the Sevier River below the Otter Creek Reservoir Dam, on the main river below the Piute Reservoir Dam to the Sevier Bridge Dam, and on the San Pitch River below the Gunnison Reservoir Dam. In this zone a strictly headgate measurement shall rule. At the beginning of each season definite allotments based on this proposed determination shall be made by the Water Commissioner which may be drawn on at the pleasure of the owner, but which shall not exceed the schedule of rights arranged by the said Water Commissioner. There shall be a yearly allotment made at the beginning of each irrigation season by the said Water Commissioner which shall be dependent upon what the supply is determined by the said Water Commissioner to be, but which shall not exceed the value of the maximum allowed in this proposed determination. In case the supply is determined to be less than maximum for the season then the rights shall be prorated on a basis of the minimum which value is given in this proposed determination. The rights in this zone are given maximum and minimum values since rights are contingent directly upon the stream flow throughout a year.

## Zone B.

This zone comprises the rights on Panguitch Creek below Panguitch Lake; on the main river from the Sevier Bridge Reservoir to Oasis; on Chicken Creek below the Chicken Creek Reservoir Dam and rights under the Molen Springs, Koosharem Reservoir and Box Creek Reservoir. Rights in this zone are to be placed on a headgate duty and are to have a maximum yearly diversion except in years when the maximum total is not available in which event the several rights are to be placed on a pro-rata basis. Rights in this zone are placed on maximum value for the reason that any amount of water beyond this value shall be held as holdover for dry seasons. In this zone a holdover supply is a necessity since the rights are not directly contingent upon the stream flow throughout a season.

## Zone C.

This zone comprises all rights not specified in Zone A, Zone B and Zone D and which cannot be placed on a headgate duty due to location and physical conditions. Such rights must consequently be placed on direct flow. The rights in this zone are allowed on a duty of 40 acres to a second foot during the high water period which is the period wherein the water supply is sufficient to give to all lands a full right on this duty. After the water supply is insufficient to fill the rights as above set forth, then the duty shall be raised to 60 acres to the second foot

and distributed upon this basis until the supply in this said zone is insufficient to fill all rights under the 60 acres to the second foot duty, then those having the junior or subsequent appropriations shall be barred, in order of priority from further diverting water until said source of supply again increases to such volume as will fill said subsequent appropriator's rights, providing, however, that said increase in flow comes within the period of use set out in this proposed determination of rights.

## Zone D.

This zone comprises all rights in the San Pitch Drainage Area except those rights under the Gunnison Reservoir System. Rights in this zone are to be on a direct flow basis having a duty of from 35 to 80 acres to the second foot. When there is insufficient water to satisfy the low water rights within this zone then the water is to be pro-rated and distributed on a priority basis.

## VIII.

Section 34, Chapter 100, Session Laws of Utah, 1903, reads as follows:

"Rights to any of the unappropriated water in the State may be acquired by appropriation, in the manner hereinafter provided, and not otherwise\* \*."

Acts amendatory to said Chapter 100 contain the same provision. Because of that provision of the law, upheld by the Supreme Court of Utah, all persons who have used water since 1903 without first making application therefor as provided by Statute, are determined to have no right, title or interest in or to the use of water of the Sevier River System by reason of such use.

## IX.

That the duty of water as hereinafter set forth was determined from decrees of court, from reports of water commissioners duly appointed to distribute the water of said system, from field investigations made under the direction of the State Engineer, from statements of water users' claims duly filed in this case and from records of the duty of water established by investigation, measurements and distribution of the waters of other river systems in the State of Utah over a period of years, where conditions under which water has been used are similar.

The apparent low duty of water on the tributaries and on the San Pitch River and its tributaries, is allowed for the reason the sources of supply are intermittent and variable, and in order to supply sufficient water to properly mature the crops, it is necessary to use large quantities of water when available. Alfalfa, grain and garden products are the main crops, and which require early and increased irrigation for their proper maturing. Furthermore, it is advisable to allow the use of these increased quantities whenever possible inasmuch as ground storage is the only source of supply after the high water is gone.

The beneficial use of water governs in all cases in this proposed determination of rights and the waste of water shall be prohibited.

## X.

It is recommended that in cases where the quantities of water determined to various individual rights are too small for practical irrigation purposes such rights be combined wherever feasible and rotated among the various users in such manner as to deliver to each the total quantity of water which he would receive if distribution were made on the basis