

## I. THE SOURCE

In order that the character of the country through which the Rio Grande flows may be easily understood, three major divisions are presented here, designated as THE SOURCE, MIDSTREAM, AND THE BORDER.

THE SOURCE contains the part of the Rio Grande from its very beginning to the southern end of the San Luis Valley where it enters the Rio Grande Canyon in northern New Mexico.

The High Country of THE SOURCE, where the river rises, covers a vast portion of the eastern slope of the Continental Divide in the San Juan Mountains of southern Colorado. From the soaring peaks of these mountains, the High Country and the Upland Valley gradually diminish in elevation through a distance of eighty miles, as fold after fold of forest-covered mountain drop down some five thousand feet to the great inter-mountain park--The San Luis Valley.

Augmenting the first small flow of the Rio Grande, countless snow-fed brooks, emerging from secluded valleys, join the river, quickly increasing its volume as it rushes down its first descent. Thick, deep forests of spruce, fir and aspen retard the melting snow in spring, holding back moisture to be released gradually as the season advances. As the main river valley deepens and widens, so do those adjoining, whose confluent streams ever increase the flow, as the Rio Grande grows from brook to stream, from stream to river.

Emerging from this depth of mountain masses, the river enters the San Luis Valley at an elevation of seventy-five hundred feet. This park-like, level valley, containing an area the size of the state of Massachusetts, is bounded on the west by the main range of the Rocky Mountains, and on the north and east by a long, high spur, the Sangre de Cristo Range. This spur, beginning in the northwestern corner of the valley where it stems from the Continental Divide, runs east for approximately eighty miles, forming the valley's northern boundary. Turning south, this magnificent range of high mountain peaks, extends more than two hundred miles terminating just beyond Santa Fe, New Mexico. Once the home of countless herds of bison and other large animals, the San Luis Valley is now an area of extensive farms. Its northern portion is watered by many artesian wells in addition to small streams from the surrounding mountains; its central and southern part is irrigated by water from the Rio Grande.

Flowing out into the center of the San Luis Valley, the Rio Grande turns south just beyond the town of Alamosa. Crossing the Colorado-New Mexico line approximately thirty miles below, and continuing through the sparsely settled lower end of the valley, the river reaches the low, volcanic hills where it cuts its way into the great gorge and the MIDSTREAM portion of the river begins.

High Country - The High Country of The Source, where the river rises, covers a vast portion of the eastern slope of the Continental Divide in the San Juan Mountains of southern Colorado. From the soaring peaks of these mountains, the High Country and the Upland Valley gradually diminish in elevation through a distance of eighty miles, as fold after fold of forest-covered mountain drop down some five thousand feet to the great inter-mountain park--The San Luis Valley.

- 11X14 page 5 THE FIRST TRICKLE AT STONY PASS
- 8X10 page 7 THE INFANT RIVER
- 16X20 page 11 THE VALLEY WIDENS WITH THE URGENT DESCENT OF THE RIVER
- 16X20 page 13 THE RIVER HAS WORN MANY SMALL CANYONS IN SAN JUAN MOUNTAINS
- 11X14 page 17 BELOW THE RESERVOIR, THE RIVER POURS THROUGH THE NARROW,  
WALLED VALLEY GUARDED BY THE HIGH PEAKS OF THE CONTINENTAL DIVIDE

The Upland Valley - It is here, less than forty miles from the source of the river, that the first irrigation ditch is diverted to give added growth to the natural grass. From this point throughout the entire length of the river, a distance of nearly eighteen hundred miles, the water of the Rio Grande is constantly turned upon the land. Only one other river in the world is used so completely for irrigation--that river is the Ganges of India. Small wonder that strangers are disappointed in the size of the Rio Grande, for it is hard to realize the great quantity of diverted water that is given annually to the soil.

- 16X20 page 26 NATURAL HAY MEADOWS AT NINE THOUSAND FEET
- 11X14 page 31 MANY CATTLE ARE PASTURED IN THE UPLAND VALLEY
- 16X20 page 33 A FLASH OF SUNLIGHT PRECEDES A THUNDERSTORM
- 11X14 page 34 TALL SPRUCE BORDER THE RIVER FOR SEVERAL MILES AS IT DROPS  
DOWN FROM THE UPLAND VALLEY, AND THE HIGH MOUNTAINS DIMINISH  
IN THE DISTANCE
- 8X10 page 35 CREEDE, A MINING TOWN, IS THE FIRST COMMUNITY TO BE FOUND, SOME  
SIXTY MILES BELOW THE SOURCE OF THE RIVER
- 16X20 page 39 EIGHT MILES BELOW CREEDE, THE RIVER PASSES BETWEEN RUGGED  
CLIFFS FORMING AN OPENING CALLED WAGON WHEEL GAP
- 11X14 page 43 BELOW WAGON WHEEL GAP, THE CHARACTER OF THE COUNTRY CHANGES  
AS THE RIVER APPROACHES THE SAN LUIS VALLEY.

San Luis Valley - In few localities is the immensity of space more clearly felt than in the San Luis Valley. Perhaps this is because one can see so far in the high clear air, unsullied by the smoke of cities. The great distance across the valley seems to dwarf the one-hundred-mile stretch of the fourteen-thousand-foot peaks of the Sangre de Cristo Range, making the dome of the sky immeasurable. Because of the deep red color reflected at sunset on the snow-covered mountain peaks, a Spanish priest named this range Sangre de Cristo--"The Blood of Christ."

- 8X10 page 48 WATER AS IT STANDS IN A RESERVOIR IS MEASURED IN ACRE-FEET, BUT WHEN  
IT BECOMES ACTIVE--GOING INTO USE--IT IS MEASURED IN TERMS OF  
SECOND-FEET.\* THIS IS THE FIRST LARGE DITCH, THE HEADGATE WAS  
BUILT IN 1882. THERE ARE SEVEN MAJOR DITCHES SUCH AS THIS, AND  
SIXTY-FIVE SMALLER ONES, THE AGGREGATE OF WHICH MAKES POSSIBLE  
THE PROFITABLE FRAMING OF OVER SEVEN HUNDRED THOUSAND ACRES OF  
LAND IN THE SAN LUIS VALLEY. WITH THIS QUANTITY OF WATER TAKEN FROM  
THE RIVER, THE VOLUME OF THE RIO GRANDE IS GREATLY DEPLETED,  
LEAVING A MUCH SMALLER FLOW, AS IT ENTERS NEW MEXICO, THAN WAS  
KNOWN BY THE EXPLORERS AND PIONEERS OF THE EARLY DAYS.



11X14 page 49 FEW OF THE EARLY SPANISH EXPLORERS FOLLOWED THE RIVER NORTH  
BEYOND THE SAN LUIS VALLEY

8X10 pg. 55 SOME THIRTY-FIVE THOUSAND ACRES OF THE RICH IRRIGATED LAND OF THE  
VALLEY ARE DEVOTED TO THE PRODUCTION OF POTATOES WHICH GROW HERE  
WITH EXCEPTIONAL VIGOR AND FINE QUALITY. IN SUCH A FIELD AS THIS,  
THE YIELD IS DOUBLE THE AVERAGE. DURING THE YEARS OF PLENTIFUL  
WATER SUPPLY SOME FIELDS ARE SUB-IRRIGATED, FEEDING THE PLANTS  
FROM BENEATH, BUT IN YEARS OF DROUGHT SURFACE IRRIGATION MUST  
BE DONE ABOUT EVERY TWO WEEKS, OR FIVE TIMES DURING THE GROWING  
SEASON.

\* acre-foot - the volume that would cover one acre to a depth of one foot

second foot -

two acre-feet equal one second foot

Yukto make

16 X 20

Wagon Wheel Gap.

Rio Chiquito

Sandia Bent

Conchos

Santa Elena

Smile

(6)

11 X 15

Black Mesa

below E.P. & San Hills

Stuy + train

Boquillas Canyon

Near Hot Springs

Gueros

(6)

8 X 10

Taos + Sangre

Kuana

Albuquerque

Dam

Jump Bridge

Jump. Evening

Gila

Pumping Station

Brownsville Bridge

Granada

(9)