

ANNUAL REPORT
DIVISION SEVEN for 1967

GENERAL

This year's irrigation season started out to be about non-existent. In the fall of 1966 we had plenty of moisture, November thru February there was above normal precipitation. We had a good snow pack in the high mountains, most of the moisture at low levels came in the form of rain. The result of this moisture pattern very low early spring runoff occurred. The late or high runoff exceeded expectations.

Many of our reservoirs in this Division are filled with low runoff, as a result a high percentage did not fill. Even our major reservoirs, Vallecitos, Groundhog and Lemon did not fill.

SNOW PACK

Beginning with January the following forecast was made.

| Station | Date | Water Content inches | 1948-62 Average Water Content Inches |
|-------------------|-----------|-------------------------|--|
| Upper San Juan | January 1 | 19.6 | 12.2 |
| | May 15 | 8.3 | 21.6 |
| Wolf Creek Pass | January 1 | 17.8 | 9.4 |
| | May 15 | 9.3 | 16.2 |
| Wolf Creek Summit | January 1 | 16.8 | 13.1 |
| | May 15 | 25.1 | 31.5 |
| Red Mountain | January 1 | 10.7 | 11.6 |
| | May 15 | 19.8 | 30.7 |

The above indicates fairly well "the story of our life" this water year. At the beginning of the snow season everything pointed "up". We did not have the late and heavy snows that we need for an early good runoff. We had very high winds during the winter months causing large snow drifts that accumulated at high elevations steadying the late runoff.

RUNOFF OF THE MAJOR RIVERS IN THIS DIVISION

| River | Station | Period of Average | Amount Acre Feet Average | Amount Acre Feet* 1967 | Percent. of Total |
|----------|------------|-------------------|--------------------------|------------------------|-------------------|
| San Juan | Pagosa Sp. | 36 | 269 | 186 | 69.1% |
| Dolores | Dolores | 56 | 246 | 177 | 72.0 |
| Animas | Durango | 62 | 499 | 360 | 72.1 |
| La Plata | State Line | 37 | 23 | | |

TEMPERATURE

| Station | Nov. (66) | Dec. (66) | January | February | March | April |
|------------|-----------|-----------|---------|----------|-------|---------|
| Cortez | 42.4 | 28.7 | 25.4 | 35.0 | 44.0 | 46.0 |
| Dep. | -0.4 | -0.8 | -2.1 | +3.1 | +5.5 | -1.4 |
| | May | June | July | August | Sept. | October |
| | 54.0 | 62.7 | 72.0 | 69.2 | 62.9 | 51.6 |
| Dep. | -1.9 | -2.0 | +0.7 | -0.4 | +0.7 | +0.4 |
| Durango | 41.3 | 27.4 | 23.8 | 33.3 | 42.7 | 43.7 |
| Dep. | +5.7 | -0.5 | -1.5 | +3.6 | +6.0 | -1.4 |
| | May | June | July | August | Sept. | October |
| | 52.6 | 59.1 | 69.7 | 64.5 | 59.3 | 49.2 |
| | +0.1 | -1.5 | +2.7 | -1.5 | +0.3 | +3.6 |
| Fort Lewis | 37.7 | 24.5 | 21.9 | 28.9 | N.R. | 38.7 |
| Dep. | +4.5 | -1.4 | -1.1 | +3.0 | | -2.5 |
| | May | June | July | August | Sept. | October |
| | 48.5 | 55.7 | 66.6 | N.R. | 56.4 | 48.1 |
| Dep. | -0.5 | -1.5 | +3.0 | | +0.7 | +1.9 |
| Silverton | 30.7 | 18.1 | 16.6 | 18.1 | 29.1 | 33.8 |
| Dep. | +4.1 | -1.2 | -0.1 | -0.9 | +5.3 | +0.6 |
| | May | June | July | August | Sept | October |
| | 42.3 | 47.9 | 57.4 | 53.9 | 50.8 | 41.8 |
| Dep. | +0.4 | -1.8 | +2.3 | -0.2 | +1.8 | +2.9 |

PRECIPITATION

| Station | Nov. 1966 | Dec. 1966 | Jan. | Feb. | March | April |
|-----------|--------------|--------------|-------|--------|-------|---------|
| Cortez | 1.01 | 2.56 | 0.57 | T | 0.17 | 0.39 |
| Dep. | +0.26 | +1.44 | -0.49 | -1.10 | -0.92 | -0.70 |
| | May | June | July | August | Sept. | October |
| Dep. | 0.58 | 0.32 | 1.75 | 2.81 | 0.48 | 0.03 |
| | -0.28 | -0.22 | +0.54 | +1.30 | -0.93 | -1.42 |
| Durango | 1.44 | 5.36 | 0.93 | 0.12 | 0.43 | 0.08 |
| Dep. | +0.46 | +3.73 | -0.68 | -1.18 | -1.06 | -1.21 |
| | May | June | July | August | Sept. | October |
| Dep. | 0.69 | 1.19 | 2.72 | 3.53 | 1.23 | 0.06 |
| | -0.45 | +0.34 | +0.91 | +1.17 | -0.50 | -1.82 |
| Ft. Lewis | 1.67 | 5.98 | 0.67 | 0.17 | N.R. | 0.27 |
| Dep. | NR | NR | -0.97 | -1.54 | | -1.21 |
| | May | June | July | August | Sept. | October |
| Dep. | 0.83 | 1.22 | 2.51 | 3.06 | 0.54 | 0.07 |
| | -0.36 | +0.22 | +0.76 | +0.92 | -1.26 | -1.96 |
| Silverton | 1.10 | 3.90 | 2.99 | 0.75 | 0.64 | 0.62 |
| Dep. | -0.06 | +2.40 | +0.58 | -0.92 | -1.44 | -1.14 |
| | May | June | July | August | Sept. | October |
| Dep. | 0.82 | 2.14 | 1.96 | 3.42 | 1.33 | 0.67 |
| | -0.57 | +0.73 | -0.51 | +0.60 | -0.95 | -1.22 |

CROPS

The weather pattern this year was not conducive to growing agricultural crops, the early spring, dry and warm, started plants to grow. Most of the range lands started to show signs of green as early as March. The winter returned in April with very cold weather and no rain, as a result all or nearly all of the fruit was lost to freezes in this Division. Winter wheat started to grow but dried up before harvest. Most of the pastures and hay lands dried up or were grazed down and it was necessary to feed cattle before the summer rains. Below average hay was produced. The only crop that was average or above average was the pinto bean crop on the "dry side" on lands west of the La Plata River, and in the bean country around Cortez.

INSPECTION OF RESERVOIRS

An inspection was made of all existing reservoirs in this Division. Satisfactory repairs have been made to the three reservoirs in District 69. Havilland Dam in District 30 is again ready for the test to see if it will hold water. Summit Dam in District 32 needs the spillway cleaned of trees. The minor leak in Lemon Dam on the right side seems to have stopped. Two "trepass" dams in District 69 were reported.

STOCK TANKS :

It is estimated that, on an average, 5 stock tanks a week were inspected. Some of these tanks before plan were submitted and some afterwards. The ASC has been cooperative in not submitting locations for approval where there is a question of water rights. Trouble is starting to "brew" over the construction of tanks above existing stock tanks, in all probability we will have one or two test cases on this type of trespass in court within the next year. This points to the future need of Adjudicating all stock tanks.

ADJUDICATIONS

We have received new Court Adjudications for District 30 and 33.

Testimony is still being taken in District 69.

The Adjudication Court is still open in District 29 but should close December 15th.

The Adjudication hearings in District 30 closed November 10th.

Many of these new claims for water in these new hearings are on side drainages and have a direct bearing on the location and construction of stock tanks.

COMPACTS

The La Plata Compact resented a minimum amount of trouble this year, although water users especially in Colorado were far from being satisfied. With no low snow and a very dry spring the runoff at Hesperus on the La Plata River stayed below 120 c.f.s. most of the time when the runoff in "normal" years should reach 300 c.f.s. Due to these low flows Junior Water Users in Colorado did not receive any water in their ditches. In New Mexico Senior and Junior water users rotated between themselves and in this way were able to receive sufficient water to satisfy their needs. For the above reason water users in New Mexico were not interested in rotating water with Colorado. There was sufficient water at Hesperus that one half of the flow was enough to satisfy the needs of New Mexico water users.

We are not aware of any efforts being made to work up a Compact with New Mexico for the operation of the San Juan-Chama Diversion Project. It is my understanding that New Mexico is presenting claim for water in the next Adjudication Court hearing of District 29 in Pagosa Springs on December 15th. If this Compact is to be approved by each of the States and ratified by Congress preliminary negotiations should start.

STRUCTURES

With the dry spring, many ditch companies and private owners had many heated arguments this spring, I was called in on numerous occasions to "referee" their meetings. As a result of this panicky situations we receiver several "calls" for water that we had not heretofore received.

As a result of these demands several new structures were installed. On "Battle Mountain" on the upper West Mancos River in District 34 automatic recorders and check and waster structures were installed on Bob Creek, Aspen Creek and at the head of Crystal Creek Ditch. In this same complex a headgate and flume was installed on the Bauer Lakes Diversion Ditch out of Crystal Creek, also a check and waste structure was intalled at the intersection of this ditch with Chicken Creek and at the takeout of the Chicken Creek Dvision to Lower Bauer Lake. Three flumes with wells for automatic recorders were also installed. This administrative problem has existed for years, but I feel that "peace and harmony" now exists and will continue.

A new Parshall Flume was installed on Four Mile Ditch in District 29. With the completion of the San Juan - Chama Diversion Project a concentrated effect is being made to have all ditches diverting water from the Blanco, Little Navajo and the Navajo to have proper diversion structures and measuring devises.

In District 30, 3 headgates and 5 Parshall Flumes were installed.

NEW DAM CONSTRUCTION

Hurst Reservoir in District 34 was completed.

Echo Dam by the State Game Department in District 29 was completed.

Bigbees' Spence Dam in District 29 was 95% completed.

Havilland Dam District 30 repairs completed and water was being impounded once again.

Two trespass dams in District 69 by Melvin Adams completed?

SAN JUAN PROJECT (San Juan-Chama Diversion)

In general work is progressing on the diversion works in a very satisfactory manner work on all of the tunnels are ahead of schedule.

The Diversion Works and Measuring devises at the Blanco River Diversion are 90% completed.

Azatea Tunnel (Navajo-Chama) 63.7% of the work has been completed using 42.0% of the completion time. SCD 1/27/1970.

Blanco Tunnel (Blanco-Little Navajo) 74.1% completed using 54% of the allotted time. SCD 12/18/69.

Ozo (Little Navajo-Navajo) 71.1% completed in 61.0% of the allotted time. SCD 4/1/1970.

They have "holed thru" both on the Blanco and Ozo Tunnels, it is estimated that they will hole out on the Azatea Tunnel about 15th of February 1968, having about 2 3/4 miles to go.

For a very rough estimate I look for the entire project to be completed by January 1, 1969, or at least one year ahead of schedule.

MEETINGS

I attended most of the Southwest Conservancy Board Meetings held in Durango. I also attended a number of the local conservancy district board meetings as well as a number of ditch board meetings.

PERSONNEL

We are better staffed than at anytime to date. We now have three Deputy Commissioners in District 29 and as a result will have the best ditch records to date in that District. All of our men are doing a good job.

PROBLEMS

With the completion of the present Adjudication Courts and the straightening out of two or three administrative problems everything at the present time is going smoothly.

TABULATION OF WATER COMMISSIONERS ANNUAL RESERVOIR REPORTS

| District Number | Number of reservoirs reported | Area of high water line in acres | Capacity in Acre Feet | Amount in Storage, May 1, Acre Feet | Amount in Storage Nov. 1, Acre Feet |
|-----------------|-------------------------------|----------------------------------|-----------------------|-------------------------------------|-------------------------------------|
| 29 | 10 | 829 | 15,249 | 12,605 | 11,980 |
| 30 | 4 | 1503 | 62,572 | 28,331 | 35,485 |
| 31 | 3 | 2775 | 131,631 | 57,996 | 29,033 |
| 32 | 0 | 0 | 0 | 0 | 0 |
| 33 | 1 | 50 | 1,200 | 1,200 | 120 |
| 34 | 9 | 2169 | 60,286 | 42,432 | 24,278 |
| 46 | 0 | 0 | 0 | 0 | 0 |
| 69 | 3 | 55 | 603 | 546 | 393 |
| Total | 30 | 7,331 | 271,541 | 143,110 | 91,289 |

TABULATION OF WATER COMMISSIONERS ANNUAL RESERVOIR REPORTS

| District Number | 1 First day water was used from storage | 2 Last day water was used from storage | 3 Number of days water was used | 4 Number of Acre feet used | 5 Number of acres irr. from storage |
|-----------------|--|---|------------------------------------|-------------------------------|--|
| 29 | 4/1/67 | 10/31/67 | 274 | 6,082 | 5,242 |
| 30 | 4/20 | 10/31 | 189 | 20,815 | 22,575 |
| 31 | 4/21 | 10/31 | 194 | 66,072 | 38,215 |
| 32 | 0 | 0 | 0 | 0 | 0 |
| 33 | 5/15 | 10/31 | 90 | 1,175 | 566 |
| 34 | 5/5 | 10/31 | 137 | 21,394 | 51,420 |
| 46 | 0 | 0 | 0 | 0 | 0 |
| 69 | 6/12 | 7/16 | 35 | 134 | 50 |
| Total | 4/1 | 10/31 | 214 | 115,670 | 118,068 |

TABULATION OF WATER COMMISSIONERS ANNUAL DITCH REPORTS

| District Number | Amount in: c.f.s. approx. | Total Capacity of Ditches: c.f.s. | First Day water was used | Last day water was used | Number of days water was used | Average daily amount used: c.f.s. | Number of Acre feet Used. | Number of Acres Irrigated |
|-----------------|---------------------------|-----------------------------------|--------------------------|-------------------------|-------------------------------|-----------------------------------|---------------------------|---------------------------|
| 29 | 853 | 1,131 | 4/1/67 | 10/31 | 214 | 115 | 61,920 | 29,195 |
| 30 | 517 | 810 | 3/6 | 10/31 | 218 | 245 | 121,696 | 39,883 |
| 31 | 1,003 | 1,229 | 4/3 | 10/31 | 212 | 444 | 188,143 | 50,842 |
| 32 | 190 | 231 | 4/11 | 10/29 | 188 | 94 | 35,341 | 5,177 |
| 33 | 510 | 519 | 3/1 | 10/31 | 245 | 34 | 16,750 | 8,048 |
| 34 | 456 | 494 | 4/3 | 10/31 | 228 | 352 | 160,378 | 52,666 |
| 46 | 60 | 58 | 4/17 | 10/20 | 187 | 25 | 9,255 | 1,824 |
| 69 | 105 | 81 | 4/1 | 10/20 | 121 | 18 | 4,338 | 1,190 |
| Totals | 3,724 | 4,853 | 3/1 | 10/31 | 248 | 1,205 | 597,821 | 188,825 |