In the Matter of Applications 18115 and 19451 of the United States Bureau of Reclamation to Appropriate from Stony Creek in Tehama County

DECISION APPROVING APPLICATION 18115 IN PART AND DENYING APPLICATION 19451

Application 18115, filed on April 30, 1958, by the State Department of Water Resources and assigned to the United States on November 15, 1960, is for a permit to appropriate 160,000 acre-feet per annum by storage to be collected year-round from Stony Creek for irrigation, domestic, municipal, industrial, recreational, and flood control purposes. The point of diversion is at Black Butte Dam located within the SW1/4 of SE1/4 of Section 29, T23N, R4W. The place of use consists of a gross area of 9,025,000 acres within the Central Valley Project service area.

Application 19451, filed on May 25, 1960, by the United States acting through the Bureau of Reclamation (hereinafter referred to as the Bureau) is for a permit to appropriate 225 cubic feet per second by direct diversion to be diverted between October 1 of each year and June 30 of the succeeding year for irrigation, municipal, industrial, incidental domestic and recreational purposes.

*All references to township and range are from Mt. Diablo Base and Meridian (MDB&M).
The point of diversion is to be Black Butte Dam. The described place of use consists of a gross area of 9,025,000 acres within the Central Valley Project service area, of which a maximum of 17,000 to 50,000 acres may be irrigated in any one year.

Formal protests against the approval of Applications 18115 and 19451 were received from the Stony Creek Water Users Association, Glenn-Colusa Irrigation District, and Sacramento River and Delta Water Association.

On November 28 and 29, 1961, after due notice to the applicant and protestants, a public hearing was held before Ralph J. McGill and W. A. Alexander, members of the State Water Rights Board, in Sacramento, at which time the parties appeared and evidence was received.

None of the protestants objected to permits being issued to the United States pursuant to the applications, but all urged that certain limitations and conditions be imposed.

Watershed and Water Supply

Stony Creek originates at the junction of Middle and South Forks of Stony Creek on the eastern slopes of the Coast Range. Below this point it courses in a general easterly and northerly direction for about 10 miles to its confluence with Little Stony Creek which enters from the south (Staff 4).

Below its confluence with Little Stony Creek, Stony Creek flows in a general northerly and northeasterly direction
about 35 miles to the site of Black Butte Dam. Here Stony Creek turns and flows southeast approximately 25 miles to discharge into the Sacramento River (Staff 4).

Stony Creek drains an area of about 735 square miles above Black Butte Dam having a maximum elevation of about 7,000 feet above sea level. No significant accumulation of snow occurs in the watershed. The average annual runoff at Black Butte Dam is 410,000 acre-feet and during the period of record has varied from a maximum of 1,035,000 acre-feet to a minimum of 30,000 acre-foot (USBR 3).

Facilities on Stony Creek

Orland Project of the United States

The flow of upper Stony Creek is regulated by Rainbow Diversion Dam which is located about 4 miles upstream from the mouth of Little Stony Creek. This dam diverts water through the 7-mile East Park Feed Canal for storage in East Park Reservoir having a capacity of 50,900 acre-feet. This reservoir is created by East Park Dam located on Little Stony Creek about 4.5 miles above its mouth (Staff 4 and USBR 3).

The flow of Stony Creek is also regulated by Stony Gorge Dam located about 12 miles downstream from the mouth of Little Stony Creek. This dam creates a reservoir having a capacity of 50,000 acre-feet (Staff 4 and USBR 3).

Stored water released from the upstream facilities as well as natural flows are diverted from Stony Creek at the
Southside and Northside Diversion Dams for use on approximately 20,000 irrigated acres within the Orland Project service area (USBR 3). Southside Diversion Dam is located at Black Butte Dam and will be replaced by the latter structure. Northside Diversion Dam is located approximately 5 miles downstream from this point (Staff 4). The facilities as presently operated provide the Orland Project with an average annual yield of 80,700 acre-feet from Stony Creek (USBR 13).

Glenn-Colusa Irrigation District

In addition to the features mentioned above, additional water is diverted from Stony Creek by a gravel diversion dam installed each year by the Glenn-Colusa Irrigation District at a point about 3.5 miles upstream from the mouth of Stony Creek. This dam forms the left bank of the Glenn-Colusa Canal (Staff 4). The dam is usually installed during the latter part of March or the first part of April and is usually removed during the month of November (Glenn-Colusa 3). While the dam is in place, the entire flow of Stony Creek at this point is diverted into the Glenn-Colusa Canal. Consequently, every year during the period May through October Stony Creek contributes practically no flow to the Sacramento River.

Operation of Black Butte Project

Black Butte Project was authorized as a Federal undertaking by Congress in the Flood Control Act of 1944 in accordance
with House Document 649, 78th Congress, 2nd Session (USBR 1). Black Butte Reservoir will have a gross capacity of 160,000 acre-feet. The dam is being constructed by the United States Corps of Engineers. Other principal features of the project include a lined, uncontrolled spillway located near the left abutment of the dam, a combination flood control and irrigation outlet through the right abutment of the main dam, and an irrigation conduit diverting from the outlet works to deliver water into the South Canal of the existing Orland Project (RT I-13).

South Canal will be enlarged to a capacity of 225 cfs to a point where Stony Canal will diverge from South Canal. Stony Canal will continue with a capacity of 225 cfs and discharge into the Tehama-Colusa Canal of the Federal Central Valley Project (USBR 8 and 10). The existing North Canal will be served by releases from the outlet works into the channel of Stony Creek.

Black Butte Reservoir will be used primarily for flood control purposes, but it will also provide water conservation benefits. The water conserved will be used for irrigation purposes and to meet such domestic, municipal, and industrial demands as may occur. The estimated conservation yield is 59,000 acre-feet annually (RT I-15).

Approximately 40 per cent of the cost of the project has been allocated to irrigation, and the Bureau has been assigned the responsibility for negotiating necessary sales contracts for the purpose of repayment of those project costs by the water
users (RT I-14). Reassurance that the costs allocated to irrigation will be repaid was given by the State of California in the form of a contract with the United States. Under the terms of this contract the State is obligated, during the first seven years after completion of the project, to make payments to the Federal Government toward repayment of the capital costs allocated to conservation purposes. Starting in the eighth year and for thirty-two years thereafter, the balance of these costs must be repaid in equal annual installments (USBR 11). The State will be relieved of this obligation to the extent that the Bureau can find other customers for the water during the initial 7-year period. The contract also provides that should Congress authorize the Black Butte Project to be incorporated into the Federal Central Valley Project during the initial 7-year period, then the United States may terminate the contract, thus relieving the State of its repayment obligation (RT I-15-16).

Three possible areas of use are contemplated in the operation of the project. The first is the Stony Creek Drainage Basin above Black Butte Reservoir. By coordinating the operation of Black Butte, East Park, and Stony Gorge Reservoirs, it would be possible to use the latter two solely for conservation purposes (RT I-121). Water stored there could be used in the area located upstream from Black Butte Reservoir, and water stored in Black Butte Reservoir could be used to satisfy requirements of the Orland Project presently met by storage releases from the upper reservoirs (RT I-16).
The second possible area of use for the water sought to be appropriated pursuant to these applications is in the area immediately below the dam, principally in the vicinity of the Sacramento Valley canals of the Federal Central Valley Project. Water would thus be diverted into the proposed Stony Canal and delivered to lands lying above and below the Tehama-Colusa Canal (USBR 10). Under this plan, the operation of Black Butte Dam for conservation purposes would be coordinated with the operation of other Central Valley Project features.

The third area that can be considered for possible use of Black Butte Project water is in the general service area of the Central Valley Project. Under this alternative, water would be released from Black Butte Reservoir and allowed to flow down Stony Creek into the Sacramento River and then redelivered at other points, probably in conjunction and on a coordinated basis with the water supply from other Central Valley Project reservoirs. Such a plan would include some arrangement to bypass water around Glenn-Colusa Irrigation District's diversion (RT I-17-18).

It is estimated that on the average 10,600 acre-feet can be made available for use in the watershed area above Black Butte Dam and an additional 48,400 acre-feet will be available on the average for use below the dam (RT II-93). Initial efforts to sell the water will be made in the area immediately above and in the immediate vicinity of Black Butte Dam. If there is not sufficient local demand, particularly during the early years of the project, beneficial use would be made in conjunction with the Central Valley Project (RT I-16-19).
Existence of Unappropriated Water

The estimated historical runoff of Stony Creek to Sacramento River presented in USBR Exhibit 16 was computed by subtracting the historical diversions into the Glenn-Colusa Canal from the historical flow of Stony Creek at a point near Hamilton City located downstream from all other diversions from Stony Creek (RT 1-85). Assuming a repetition of the hydrologic conditions and upstream diversions for the water years 1921-22 through 1958-59, inclusive, USBR Exhibit 16 is an indicator of the quantity and the time of occurrence of unappropriated water. In all probability, future diversions into the Glenn-Colusa Canal will exceed those which occurred historically during the first years of the period considered in the exhibit. An analysis of the exhibit discloses that water entered the Sacramento River from Stony Creek as follows:
<table>
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<th>Month</th>
<th>Per Cent of Time Water Entered Sacramento River</th>
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<tbody>
<tr>
<td>January</td>
<td>74</td>
</tr>
<tr>
<td>February</td>
<td>87</td>
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<tr>
<td>March</td>
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<td>October</td>
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<tr>
<td>November</td>
<td>13</td>
</tr>
<tr>
<td>December</td>
<td>53</td>
</tr>
</tbody>
</table>

During the period November through April, when water is flowing into the Sacramento River from Stony Creek, the flows of the Sacramento River exceed the quantities needed to satisfy downstream requirements. Unappropriated water is available in Stony Creek during this period, and, subject to suitable conditions, such water may be diverted and used in the manner proposed by the applicant without causing substantial injury to any lawful user of water. There is little or no unappropriated water available to supply the applicant at other times of the year. Accordingly, the diversion season should be limited to the months of November, December, January, February, March, and April of each year.
Quantity of Water to be Granted for Storage

USBR Exhibit 22, "Flood Control Storage Reservation Diagram", indicates that the minimum flood control reservation on April 30 would allow only 135,000 acre-feet to be placed in storage for conservation purposes. However, flood control criteria is subject to change after experience has been gained through actual operation of a reservoir. Because of this, a permit should be granted pursuant to Application 18115 for the capacity of the reservoir (160,000 acre-feet) which may be reduced at time of licensing, if conditions so warrant.

Direct Diversion

Application 19451 proposes appropriation of water by direct diversion at the rate of 225 cubic feet per second. This is the maximum rate of flow permitted by the designed capacity of the proposed Stony Canal to connect Black Butte Reservoir with the Tehama-Colusa Canal (RT I-114). The season applied for is October 1 to June 30. From November to April, the season when unappropriated water is available in Stony Creek, the irrigation demand would not be sufficient to justify the direct diversion rate except for the remote possibility of the period from March 15 to April 30 in some years. Nor is there any evidence that water appropriated by direct diversion would be used for any other beneficial purpose within the project service area through the named points of diversion. Even assuming a satisfactory
arrangement to pass the water around the Glenn-Colusa diversion works so that the flow reaches the Sacramento River, the applicant holds other permits for the full capacity of facilities to divert from the Sacramento River and in the Delta. Thus, Application 19451 is not required to accomplish the purposes of the project and therefore should be denied (RT I-104-107 and 113-115).

**Downstream Rights**

It is proposed to integrate the operation of East Park, Stony Gorge, and Black Butte Reservoirs (RT I-111); therefore, the operation of Black Butte Reservoir will not interfere with the Orland Project.

Glenn-Colusa Irrigation District urges that the storage season be limited to the period December 1 to March 15 because diversions to storage after March 15 would interfere with its prior vested rights. Although the extent of the district's rights are disputed, there is no dispute regarding the fact that the district has a right to divert water from Stony Creek. Mr. Edwin F. Sullivan, Assistant Regional Director and witness for the Bureau, stated that the United States would respect Glenn-Colusa Irrigation District's right to divert from Stony Creek as well as the rights of others defined by the decree in the case of United States of America v. H. C. Angle et al. Equity No. 30 in the Northern Division of the United States District Court for the Northern District of California, Second
Division (USBR 12 and RT 1-L4). In addition, all permits granted by the Board are issued subject to prior vested rights. Therefore, it is concluded that the months of March, April and November should be included in the storage season to permit the conservation of large flows during wet years when the water would otherwise waste to the ocean.

Watershed Protection

The Sacramento River and Delta Water Association requested that in any permit including April as part of the diversion season the Board impose a condition similar to Condition 22 of Decision D 990 authorizing the United States to appropriate from the Sacramento River and Delta. Such a condition would, in effect, make any permit authorizing the export of Black Butte Project water out of the Sacramento River watershed or Delta subject to rights initiated by other applications for use within the watershed of the Sacramento River and in the Delta, regardless of the date of filing such applications.

Black Butte Project is part of the State Central Valley Project pursuant to Water Code Section 11276, but it is not authorized by Congress as a unit of the Federal Central Valley Project. Although the service area of the Federal Central Valley Project is designated as a place of use in the application, no point of rediversion is described at which stored water will be taken from the Sacramento River or Delta for distribution to other areas. Until such time as the United States petitions for permission
to add a rediversion point to transport project water to distant lands no purpose would be served by the inclusion of a condition for watershed protection asked for by the protestant Sacramento River and Delta Water Association.

**Counties of Origin**

Present ranching practices by water users require a stockwatering reservoir for each 320 acres of grazing land (RT I-144 and I-159). On the average each of these reservoirs would be capable of storing 7 acre-feet (RT I-151 and I-158). For 328,000 acres in the watershed adaptable to grazing (RT I-144, II-7, and II-8) approximately 7,200 acre-foot of water would be required to provide a stockwatering reservoir for each 320 acres.

In view of these needs, the Stony Creek Water Users Association urges the inclusion of a condition in any permit issued pursuant to these applications similar to the following:

"The amounts which may be diverted under rights acquired or to be acquired under these permits are and shall remain subject to reduction by future appropriation of water for reasonable beneficial use within the watershed tributary to permittee's point of diversion."

Application 18115, which was assigned to the United States, contains the following condition of assignment, making the proposed appropriation subject to:

"The prior rights of any county in which the water covered by the application originates to the use of such water as may be necessary for the development of the county, as provided in Section 10505 of the Water Code."
The Stony Creek Water Users Association maintains that this condition is vague and subject to many interpretations, and it is for this reason that they urge the inclusion of the special condition in any permits issued.

The construction of small dams is beneficial not only in providing a supply of stockwater but also in providing good soil conservation practices. These parties are amply protected by the condition of assignment, principles of which will be incorporated as a permit condition, and no special condition is necessary.

**Flood Control**

At the time Application 18115 was filed by the Department of Water Resources in 1958, flood control was included among the purposes for which water was sought to be appropriated. This remained in the application upon its assignment. However, storage of water or regulation of flow for flood control purposes is a continuing paramount power of the United States conferred on it by the commerce clause of the United States Constitution. For the Board to grant a permit to the United States for such purposes pursuant to this application would be improper. Under applicable case law, such a permit term would add nothing to the constitutional power of Federal authority, and, to the extent such permit term were to purport to limit such power, it would be clearly invalid as an invasion of Federal power. The Board has previously held to this effect in
Decision D 935 (San Joaquin River applications of the United States and others) and Decision D 990 (Sacramento River and Delta applications of the United States). Accordingly, Application 18115 insofar as it relates to appropriation of water for flood control purposes will be denied for lack of jurisdiction.

Conclusions

The evidence indicates and the Board finds that unappropriated water exists in Stony Creek at times and in sufficient quantities to justify the approval in part of Application 18115; that the uses proposed are beneficial; that such waters in general, but with certain exceptions and subject to certain conditions, may be taken and used as proposed without interference with the existence of prior rights; and that the application should be approved and a permit issued pursuant thereto, subject to the usual terms and conditions and subject to those additional terms and conditions indicated in the preceding portion of this decision for the protection of prior rights. The Board finds that, so conditioned, the developments proposed in Application 18115 will best develop, conserve, and utilize in the public interest the waters sought to be appropriated.

Application 19451 should be denied for the reasons indicated in this decision.
ORDER

IT IS HEREBY ORDERED that Application 18115 be, and the same is, approved in part, and that a permit be issued to the applicant, subject to vested rights and to the following limitations and conditions:

1. The quantity of water to be appropriated shall be limited to the amount which can be beneficially used and shall not exceed 160,000 acre-feet per annum by storage to be collected from about November 1 of each year to about April 30 of the following year.

2. The maximum amount herein stated may be reduced in the license if investigation warrants.

3. Construction work shall be completed on or before December 1, 1965.

4. Complete application of the water to the proposed uses shall be made on or before December 1, 1990.

5. Progress reports shall be filed promptly by permittee on forms which will be provided annually by the State Water Rights Board until license is issued.

6. Upon the request of the Board, permittee shall make such measurements and maintain and furnish to the Board such records and information as may be necessary to determine compliance with the terms and conditions of this permit, including the recognition of vested rights, and for the further purposes of determining the quantities of water placed to beneficial use under the permit.
7. In conformity with Water Code Section 10505, this permit shall be subject to any and all rights of any county in which the water sought to be appropriated originates to the extent any such water may be necessary for the development of the county.

8. In accordance with Water Code Section 1393, the permittee shall clear the site of the proposed reservoir of all structures, trees, and other vegetation which would interfere with the use of the reservoir for water storage and recreation purposes.

9. This permit is subject to compliance with Water Code Section 10504.5(a).

10. All rights and privileges under this permit, including method of diversion, method of use, and quantity of water diverted are subject to the continuing authority of the State Water Rights Board in accordance with law and in the interest of the public welfare to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.

11. Permittee shall allow representatives of the State Water Rights Board, and other parties as may be authorized from time to time by said Board, reasonable access to the project works to determine compliance with the terms of this permit.

12. This permit does not authorize collection of water to storage during the period from about May 1 to about October 31 of each season to offset evaporation and seepage losses or for any other purpose.
IT IS FURTHER ORDERED that

(a) Insofar as Application 18115 is for flood control purposes, the same is hereby denied for lack of jurisdiction.

(b) Application 19451 is hereby denied.

Adopted as the decision and order of the State Water Rights Board at a meeting duly called and held at Sacramento, California, on this day of , 1962.

Kent Silverthorne, Chairman

Ralph J. McGill, Member

W. A. Alexander, Member