

UNITED NATIONS  
ECONOMIC  
AND  
SOCIAL COUNCIL



Distr.  
LIMITED

E/CN.12/BRW.2/L.5 Add.1  
28 May 1962

ORIGINAL: ENGLISH

ECONOMIC COMMISSION FOR LATIN AMERICA

Workshop on Problems of Budget  
Reclassification and Management  
in South America

Sponsored jointly by the United Nations Economic  
Commission for Latin America, the United Nations  
Bureau of Technical Assistance Operations, the  
Division of Public Administration and the  
Fiscal and Financial Branch of the Department  
of Economic and Social Affairs of the United  
Nations.

3-15 September 1962  
Santiago, Chile

PERFORMANCE BUDGETING FOR CAPITAL PROJECTS

(An Illustrative Application)

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Performance Budgeting for Capital Projects

The United States application of the performance budget illustrates the use of that type of budget for projects of a capital nature in the Bureau of Reclamation, a constituent unit of the Department of the Interior. The Bureau of Reclamation was established in 1902, with responsibility for developing irrigation facilities in the 17 western states of the United States. Supplementing that basic job, it has responsibilities in the fields of municipal and industrial water, flood control, and the development of hydroelectric power. In addition, it has authority to conduct studies for the development and utilization of water resources in Alaska.

The Organization and Financing Pattern

In its field, the Bureau of Reclamation has unified responsibility for planning, constructing, and operating approved projects, and for coordinating those efforts with private and other public agencies concerned with developing the same water resources. To do this effectively, the Bureau has established a decentralized organization in which program and policy direction are furnished by the Commissioner and staff offices located in Washington. Control over the execution of programs is exercised through seven regional offices located in the western states. Actual operations are carried out by offices located at the site of a project, except that in some cases consolidated project offices and other specialized field offices have been established to better serve particular needs. A centralized organizational unit in Denver, Colorado--an extension of the Commissioner's Office--provides engineering services to all regions and projects.

As background for this illustration, Appendix X sets forth part of the budget presentation of the Bureau of Reclamation. Exhibit 1 identifies the legislative appropriations that are made to finance the major programs of the Bureau, i.e., General Investigations, Construction and Rehabilitation, Operation and Maintenance, General Administration, Loans, and the Upper Colorado River Basin work. Appropriations are made for those purposes under basic legislation which requires that the cost of all projects--except for certain specified benefits--be reimbursed to the United States Government. Accordingly, since its inception, this organization has been concerned with the cost of work done, to insure repayment of the appropriated funds that are required to be reimbursed to the Government.

The specified nonreimbursable benefits--the costs of which are not required to be repaid to the United States Government--include benefits from completed facilities that improve navigation or provide better flood control, or recreational facilities that are available to the general public. The costs of such benefits are in effect borne by the United States Government through the appropriation process. On the other hand, the construction of facilities for the irrigation of land, the production and distribution of power, and the improvement of water resources for municipal and industrial purposes, is undertaken on the premise that the costs of making these benefits available are initially appropriated for by the United States Government, and ultimately will be repaid by the water and power users over a long term period of time--such as 50 years. Currently, more than 90% of the total spent for Bureau of Reclamation projects is in the latter category, classified as reimbursable and subject to long-term reimbursement by the users.

Because of the repayment provisions, operations like those of the United States Bureau of Reclamation are oftentimes carried out in other countries by public enterprise organizations that operate independently and utilize revenues for carrying out operations and additional developmental work. In the United States, a step in that direction has been taken in the sense that legislation has been introduced to provide for financing the Bureau of Reclamation through a revolving fund. That proposal, however, has not yet been enacted by the legislature, and the work of the Bureau continues to be financed through the appropriation process.

Regardless of the method of financing, however, the program management system developed and employed by the Bureau of Reclamation illustrates a planning and control system that has proven itself over a period of years. It is adaptable to the handling of capital projects from inception to completion, without regard to how the work is financed or where it is done. The system features such practices as advance planning and costing; determinations of feasibility in both engineering and repayment terms; identification of immediate and future financing needs; control of funds and work in progress; and reports on performance and cost in relation to established goals. Since these are primary requisites for the effective conduct of capital projects, the Bureau of Reclamation system provides an applied example useful for study and review.

#### The System of Operation

The project entity is the basic unit employed for programming, budgeting, accounting, and reporting in the Bureau of Reclamation. Projects are identified initially in the course of authorization and related planning

studies. In general they reflect a grouping of individual features and functional units that combine to serve the purposes of a specific developmental proposal. This illustration centers on the construction program, which is financed by the single appropriation reflected in Exhibit 2 of Appendix X. That appropriation covers the advance planning and construction of authorized projects, and the operation and maintenance of features already completed under a project that is still in the construction stage.

The budget presentation for this appropriation identifies authorized projects as activities, sets forth the financing needs, and provides a brief narrative of the work plan for the budget year. This is supported by program data on project accomplishments and goals; cost information that shows the costs involved in current projects, available resources on hand, and appropriation requirements for the completion of planned and authorized work; and a distribution of the financing request by object classification. For top level review purposes, the budget presentation for the construction program thus presents several types of program and financial data that permit a variety of analyses useful for sound decision-making purposes.

Utilizing the project as the basic entity for planning and control, the system employed by the Bureau of Reclamation has the following features:

1. A uniform coding system that provides common denominator work and cost account classifications into which all work is classified for the purposes of estimating, scheduling, budgeting, costing, and reporting.
2. Requirements for long-range planning over a seven-year period, as well as more detailed short-range planning and estimating for the annual budget as part of the long-term plan.

3. A uniform method of developing estimates for each project that identifies the best current estimate of total cost regardless of the source of financing.
4. A uniform control schedule that applies the time element to cost estimates and serves as the basis for planning, operating, control, and reporting.
5. A uniform method of justifying budget requirements for each project, based on the related control schedule.
6. A work order system that operates within the context of the approved program--which authorizes work to be done, establishes time and cost limits, and the accounts to be maintained.
7. A series of reports, based on the control schedules and work orders, that show results in terms of physical accomplishments, cost experience, and the use of funds.

Within this system, the financial management practices of the Bureau of Reclamation are adapted to the operating structure and are applied consistently throughout the organization in accordance with manualized instructions issued by the central office. For the purposes of fund control, authority and responsibility for use of appropriated funds within the approved program are decentralized to the regions and the project offices. Allotments are made by project to regional directors, who in turn suballot funds to project offices where the detailed accounts are maintained. In some few cases, centralized accounting units are maintained at the regional level--also in terms of projects; and in those cases, allotments go no further than that level. Program and operating controls are also based on

the project entity, but are exercised in terms of costs. Responsibility for control of costs in relation to the approved program is vested in operating officials at the project level.

#### The Authorization and Planning Process

Before a project can be undertaken by the Bureau of Reclamation, the substantive proposal must be approved by the United States Congress. A project proposal can arise in a number of ways, e.g., stimulation by local citizens through requests of their representatives in Congress; action by a State to obtain Federal assistance in a local problem; proposals by individual congressmen to resolve local, regional, or national problems; or suggestions by the Bureau of Reclamation itself. Such a proposal might be designed primarily to develop municipal or industrial water, or to fill a need in a basin development plan; or it might cover the comprehensive development of a river basin, such as the Missouri River Basin work or the Central Valley Project in California (see Appendix X).

To obtain congressional authorization for a project proposal, a "feasibility report" is prepared--to identify the major physical components of the proposal, its anticipated benefits, estimated costs, and engineering feasibility. Essential findings are that the value of the benefits be equal to or exceed the costs, and a determination that the reimbursable costs can be repaid to the United States Government within the required time period. The investigations and studies for feasibility are made by regional staff of the Bureau of Reclamation and financed by the General Investigations appropriation. When a feasibility study is completed, it is reviewed throughout the Bureau and sent with a recommendation to the Secretary of the Interior. If he approves, the project proposal is submitted to the Bureau of the Budget and ultimately to Congress for consideration.

When approved by Congress, the feasibility study becomes the general guide for construction work, and funds are requested under the Construction and Rehabilitation appropriation for advance planning and ultimate construction of the proposed facility. The authorized proposal is refined in the advance planning stage by development of a "Definite Plan Report," which describes in detail the physical features to be constructed and the estimated costs. The cost estimates are prepared in terms of current prices, and include the present value of donations from other projects, agencies, etc. Those estimates are never final, however, until each feature is completed and placed in service. In the interim, they are revised periodically to reflect actual experience to date and the current best estimates for the future. Those revisions are made at least annually--as part of the budget process--to reflect the most accurate estimate of total cost and its effect on the benefit-cost ratio, i.e., the repayment feasibility of the project. As part of the budget, major revisions are explained and justified to the top level officials involved in executive and legislative budget review.

The costs of a project are required to be initially estimated and ultimately recorded in terms of the common denominator property and cost account classifications shown in Exhibit 1 of Appendix Y. This coding system establishes property categories that are to be used to classify all work under a project, and identifies uniform cost accounts to be maintained under the property categories. A project that includes a steam powerplant, for example, would code such work under property class 10. Funds spent in clearing land for the powerplant site would be recorded under account 32. Throughout the conduct of that project, such work would be coded under the symbol 10.32. Since such an approach is used for all construction work, the project cost

data are maintained on a consistent basis throughout the financial management system. This permits the development of summary and detailed information as required for different management purposes throughout the Government.

Basic to the programing process is the Official Estimate form-- Exhibit 2 of Appendix Y. That form is required for each project from the time it is recommended for authorization by a finding of feasibility until construction is complete. The Official Estimate--in summary terms--identifies the features of the project, i.e., the major property classes like a dam, diversion works, powerplant, etc.; physical measures of the work where appropriate; the current estimate of total cost for the project; a breakdown of costs by the kinds of labor, material, and services involved in the project; and the previous official estimate of total costs for the project. That summary is supported by detailed data on an identical form (as illustrated in Exhibit 2), which shows the same type of program measures and cost information for the units under each feature and for expenses that are to be distributed. The units under each feature reflect the property and cost account classifications of the uniform coding system--like clearing lands for a powerplant site (.10.32). Such code symbols are shown in the left-hand column of the form.

The cost data on these forms must cover the entire project and all costs chargeable to construction--including the values of property on hand or expected to be transferred in without expenditure of funds. The Official Estimate is prepared at the "grass roots" level, by the officials responsible for carrying out the work. Each Official Estimate or revision must be approved by the Commissioner of the Bureau of Reclamation.

When an Official Estimate is approved, the time factor is added. This is done by means of the Control Schedule and the Supporting Schedule, Exhibits 3a and 3b of Appendix Y, which also are prepared by project personnel. These schedules basically are bar charts that show program and financial data and the timing of significant program events. This includes the property and cost account classifications of the work; the description of the features of the project; the quantity and units of physical measure; bars showing the timing of the work; and the estimated completion date for each feature. The financial data include the total cost estimate; prior costs; projected costs for the current year, the budget year, and five succeeding years; and requirements beyond that period. The cost data in the various columns--representing work in place--are reconciled in total to the expenditures accrued (goods and services received); obligations (orders placed); funds available (allotments); and funds required for the future. The Supporting Schedule shows the work details under each feature, and provides a quarterly breakdown of the current and budget years--using flag symbols to bring out the significant starting and completion dates for specific segments of the work. Since data in the Supporting Schedule are developed for each major segment of work--such as obtaining land rights or entering into a supply contract--it results in a detailed, bulky package that needs consolidation for management review purposes. This is done by means of the Control Schedule, which shows the same kinds of data consolidated by major feature of the project.

The Control Schedule is the keystone of the Bureau of Reclamation's programming process, since it provides the complete story and schedule on each project in total and in annual terms over a seven-year period. It simultaneously provides the basis for management decisions on long-range

programming, preparation of the annual budget, and execution of an approved program of work. After preparation at the "grass roots" level, it is subject to approval by responsible officials at the project office level, the regional director and his staff, the Commissioner and his staff, and--in the annual budget process--by top level officials in the executive and legislative branches. When a Control Schedule is signed by the Commissioner of the Bureau of Reclamation, it becomes part of the approved program that is to be carried out by project officials under the direction of a regional director.

#### The Budgeting Process

In budget formulation each year, to establish long-range construction goals and provide for anticipated work, the regional directors prepare an advance construction program that identifies all projects which may become active during the next seven-year program period. This requires the scheduling of construction on all projects not included in the budget year plan but on which the start of construction is anticipated before the end of the related seven-year period. The advance construction program includes two categories of projects--those already authorized by Congress, and those not yet authorized but for which authorization and an appropriation of funds are expected in the period covered by the program. The form prescribed for this purpose requires program and cost data like that in a Control Schedule, and identification of the year in which construction work is expected to start.

In addition, preliminary estimates are prepared by field operating officials for all active projects, as a basis for developing an overall estimate of construction requirements at the departmental level. This is done about 14 months prior to the start of the budget year. Those estimates are

based upon currently approved Control Schedules and are submitted in terms of a one-line entry for each project. The data presented for each project show past obligation requirements, the budgeted allowance for the forthcoming current year, the estimated requirements for going work and new work in the succeeding budget year, and obligation authority needed beyond that period until completion.

Following analysis of those data, top level guidance is provided in the form of the approved appropriation for the current year and a ceiling for the construction appropriation for the budget year. That guidance is used by project officials to firm up the current and budget year columns of each approved Control Schedule and its Supporting Schedules. After consideration of those data at the several management levels, a program review conference--involving the Commissioner and his aides, and the regional directors and their staff assistants--is held to make final determinations. In this conference the Supporting Schedules for each project are reviewed for feasibility of the planned work and the fund and cost requirements. Program consistency and adherence to policy are given full consideration, arrangements are made for necessary coordinating action, problem areas are identified, and decisions are made on the steps to be taken by management at various levels of operation. The conference decisions are reflected in revised Control Schedules, which form the backbone of the budget submissions and justifications. Formal budget materials are prepared at the project level and reviewed at the regional and Washington offices. After the Commissioner of the Bureau of Reclamation makes final determinations on the budget request, it is forwarded to the Department of the Interior for review and concurrence.

A full presentation of the construction program is made to top level review officials in the executive and legislative branches, based on the

data shown in Appendix X. Supplementing that presentation, justification materials in the form of Exhibits 4a, 4b, and 4c of Appendix Y are prepared to bring out the details of each project. The Project Data Sheet (Exhibit 4a) provides a summary picture that shows the location of the project, its features, benefits, and the percentage of completion; the dates of authorization, certification, and approval of the Definite Plan Report; the latest benefit-cost ratio, the allocation of costs among benefits, and the repayment provisions; and summary financial data that identifies the source of financing for the total costs, and appropriation requirements of the past, present, and future. Brief narrative statements (Exhibit 4b) are provided on the work status and budget year plan for each feature; and a financial schedule that is drawn from the approved Control Schedule (Exhibit 4c) shows a breakdown of total cost by feature, and reconciles costs to financing. These data provide budget review officials at all levels an effective basis for analysis and decisions on appropriation requests.

Upon enactment of an appropriation for a fiscal year, necessary reprogramming action is taken within the Bureau of Reclamation, and a request for quarterly apportionment of funds is prepared. The proposed apportionments originate at the project level, are reviewed and consolidated at the regional and central offices, and are submitted to the Director of the Bureau of the Budget. Following the receipt of approved apportionments from the Budget Director, the Commissioner of the Bureau of Reclamation allots funds for the year by project to the regional directors and, through them, to the responsible project officials. Those allotments are based upon approved Control Schedules and, since they are made for the project as a whole, they allow

the operating manager flexibility in the use of funds for features within a project. Thus the allotment process serves the primary purpose of overall fund control, which is exercised at the project level.

#### Cost Accounting Practices

Management and control of the work performed within a project is exercised in terms of the costs of putting work in place. While obligations are recorded in project allotment records when the Bureau of Reclamation is financially committed by a contract, purchase order, etc., expenditures are accrued in the general and cost accounts when goods and services are received. Inventory, suspense, and clearing accounts are maintained for goods or services not directly chargeable to a project feature when received, and costs are entered in the designated cost accounts when action is taken to put work in place under a specific feature.

The cost accounting procedures are schematically illustrated in Exhibit 5 of Appendix Y. The basis for those procedures is the Cost Authority, which is a form of work order. Since no operations are authorized without a Cost Authority, and such an authority is not issued except for work included in an approved Control Schedule, no work can proceed unless it is part of a program that has had full review and approval.

The Cost Authority identifies the project, the feature, the related Control Schedule, the work to be done, the cost accounts to be maintained, and the time schedule for the work. The designated cost accounts, coded according to the uniform property and cost account classification (Exhibit 1 of Appendix Y), accumulate applied costs--the costs of work in place. In addition to direct costs for labor, material, etc., they are charged with indirect costs that are assembled in clearing or suspense accounts and distributed monthly. Included among the costs that are charged to projects in

this manner are the costs of supplies, equipment (including depreciation), and service facility shops--which are generally charged on the basis of use by the project; and general expenses, which are charged to a project in accordance with the proportion of total direct costs that are incurred by the project during the period. The sum of the charges recorded in these cost accounts gives a picture of work performed on a project within a given period.

As indicated by Exhibit 5, financial data pertaining to a Cost Authority are recorded in a Cost Authority Ledger. The ledger is identified with the related Cost Authority by the property and cost account classification code, and the materials, labor, services, etc., that are chargeable to the individual Cost Authority are recorded as outlined above. These ledgers provide the basic data for summary entries in the controlling general ledger accounts.

When the authorized physical work is finished, a Completion Report is prepared for each Cost Authority. That report is developed in summary form by feature and also in detail--in terms of the units under each feature. It brings together all pertinent program and financial data--showing total costs and total work, the nature of the direct costs and the distribution of indirect costs, units of measurement, and unit costs. In turn, that report provides the basis for recordings in the Plant Ledger, which is the final book of entry for the cost of plant in service and supports the general ledger account balances.

#### Selected Performance and Fund Reports

The data recorded in the cost accounts are brought together for performance analysis purposes by means of a monthly report, the Cost Authority Summary (Exhibit 6 of Appendix Y). This report is used to sum up active

cost authorities by significant project features and units, showing the identifying property and cost account classification code, the costs for the month and the total costs for the fiscal year and for the line item to date, and the major types of costs involved. The breakdown of the detailed costs by type reflects the categories maintained in the Cost Authority Ledgers. Through these reports an evaluation can be made of the degree to which the financial objectives of the cost authorities are being attained.

For the use of middle management, a Summary Cost and Progress Report (Exhibit 7 of Appendix Y) is prepared monthly after the accounts are closed. It shows, for each project by feature, the property and cost account classification code, the current estimates in relation to the approved estimates of cost for the fiscal year and for the total project, the fiscal year cost at the end of the reporting period, the total project cost to date, and the balance required to complete and the percentage of completion in each of those categories. In addition, like the Control Schedule, it reconciles the costs incurred to accrued expenditures, obligations, and available funding authority--in terms of the authorized allotment and unused funds. This report thus gives a picture of progress to date on a project--as reflected by the costs incurred--and shows the relationship of costs to available resources and the funding authority.

Supplementing that report, the Bureau of Reclamation employs a special report for top management that is due in the Office of the Commissioner by the 5th working day of each month. This is the Activities Digest Report, which is submitted by teletype and reflects key items from that Summary Cost and Progress Report. The selected items for this report are shown at the bottom of Exhibit 7. Set up by project, the Activities Digest Report

brings out the status of funds in terms of obligations to date and unobligated and unexpended balances; reflects financial progress for the year, in terms of accrued expenditures and the scheduled rate of expenditure--and the percentage relationship of those data; and provides space for a brief narrative on significant items that warrant the attention of top management.

In addition, the Bureau of Reclamation employs a report on the planned use of available funding authority that is directed toward utilizing fund allotments to the best possible advantage. This is the Forecast of Utilization of Construction Funds (Exhibit 8 of Appendix Y). Such a forecast is required monthly for each project starting in the middle of each fiscal year. It is used to control fund use during the latter part of the year--by identifying the balances still available and their probable use, and the anticipated balance at the end of the year or the additional allotment needed. This report has been one of the most useful tools for making effective use of available funds and for keeping the program on schedule. It serves to highlight problems in the financing of project work in timely fashion, so that management can take needed corrective action.

#### Features of the System

Besides providing for control of available funds, the Bureau of Reclamation system has featured the use of cost accounting for program management purposes. The system outlined above has gone through an extended period of development. In earlier years, cost accounts were maintained separately to accumulate the costs of work, while the general accounting system was developed along fund accounting lines and tied to the appropriation and budget process. At about the time the United States installed performance budgeting, more business-like methods were adopted. This involved a major adjustment of accounting practices to develop an integrated

fund and cost accounting system that centered on authorized projects. During subsequent years that system has been adjusted and refined to provide a useful operating facility and management tool.

In retrospect, it should be recognized that regardless of intensive development and refinement work, a program management system such as that illustrated is only as effective as the manner in which it is used by operating officials. The production of accurate, timely program and financial data is not in itself the answer to effective management and control. Such data are of little value until the operating managers actively utilize the information in making the many management decisions needed to carry out a capital project. Experience in the United States Bureau of Reclamation has emphasized this point--operating decisions today are made at all levels on the basis of a common body of knowledge that is made available through the techniques outlined.

For example, because of the uniform classification of accounts, the system furnishes management at all levels with many opportunities for evaluation of the programming, estimating, and control practices employed. Operation of the system provides for a constant check of actual experience against estimates. Upon completion of a project, an appraisal can be made of the accuracy and validity of the estimating procedures used, and this results in a continuous refinement process. In the annual reappraisal of total project costs and preparation of budget year requirements, the prior year cost figures furnish the operating manager with data essential for planning and a sound basis for budget estimates. The measures of physical and financial progress for individual projects, together with the long-range schedules and

estimates of work to be done, provide benchmarks useful for evaluation of status and the progress being made in development plans.

The system also provides other kinds of benefits. To cite a few, the cost reports have identified cases where the dollar limitations specified in a contract with water users would probably be exceeded. This signalled the need for renegotiation with the water users to either modify the contract and the use rates, or to make an additional assessment for the work remaining to be done. In another case, the cost reports showed that if a claim by a contractor was allowed, the total cost of the project would exceed the amount approved by Congress. On the basis of that information, remedial legislation was introduced to obtain needed authority before the project was completed. Cost statements furnished by the system are used to support bills that are rendered to water users to cover their annual payments. Similarly, the cost records provide the basis for rate determinations in the hydroelectric power operations. Thus, the system employed by the Bureau of Reclamation--besides maintaining operations within the limits of available funds--provides an effective basis for management action in estimating requirements, controlling operations, and obtaining repayments in accordance with the requirements of basic legislation.

UNITED STATES BUDGET PRESENTATION OF  
RECLAMATION PROGRAMS

DEPARTMENT OF THE INTERIOR

**BUREAU OF RECLAMATION**

The Bureau plans, constructs, and operates facilities to irrigate lands, furnish domestic water supplies, and develop related hydroelectric power and flood control in the 17 western States and Alaska.

The enactment of legislation to establish a revolving fund for the financing of the reclamation program is recommended in the Budget Message.

Appropriations to the Bureau are made from the general fund and special funds. The special funds are (a) the Reclamation fund, largely derived from certain irrigation and power revenue; receipts from the sale, lease, and rental of public lands; and certain oil and mineral revenue; (b) the Colorado River Dam fund, derived from the revenue of the Boulder Canyon project; and (c) the Colorado River development fund, derived from transfers of money from the Colorado River Dam fund. The estimates of appropriation for the budget year are summarized by source, as follows (in thousands of dollars):

<i>Appropriation title</i>	<i>Estimate of appropriation</i>	<i>General fund</i>	<i>Reclamation fund</i>	<i>Colorado River Dam fund</i>	<i>Colorado River development fund</i>	<i>Other</i>
General investigations.....	5,850	550	4,800	-----	500	--
General investigations (special foreign currency program).....	4,500	4,500	-----	-----	---	--
Construction and rehabilitation.....	158,250	88,250	70,000	-----	---	--
Operation and maintenance.....	34,400	4,822	28,087	1,491	---	--
General administrative expenses.....	9,430	-----	9,430	-----	---	--
Loan program.....	12,212	12,212	-----	-----	---	--
Upper Colorado River Basin fund.....	60,700	60,700	-----	-----	---	--
Emergency fund.....	1,000	-----	1,000	-----	---	--
Permanent authorizations.....	3,975	-----	75	3,871	---	29
Total.....	290,317	171,034	113,392	5,362	500	29

The total appropriation request of \$290.3 million represents an increase of \$4.7 million compared with the estimated current year appropriations and an increase of \$30.1 million compared with the preceding year.

UNITED STATES BUDGET PRESENTATION OF  
CONSTRUCTION AND REHABILITATION PROGRAM

BUREAU OF RECLAMATION—Continued

Current authorizations—Continued

CONSTRUCTION AND REHABILITATION

For construction and rehabilitation of authorized reclamation projects or parts thereof (including power transmission facilities) and for other related activities, as authorized by law, to remain available until expended, [\$166,444,880] \$158,250,000, of which [\$90,000,000] \$70,000,000 shall be derived from the reclamation fund: *Provided*, That no part of this appropriation shall be used to initiate the construction of transmission facilities within those areas covered by power wheeling service contracts which include provision for service to Federal establishments and preferred customers, except those transmission facilities for which construction funds have been heretofore appropriated, those facilities which are necessary to carry out the terms of such contracts or those facilities for which the Secretary of the Interior finds the wheeling agency is unable or unwilling to provide for the integration of Federal projects or for service to a Federal establishment or preferred customer: *Provided further*, That not to exceed \$25,000 shall be available toward investigation and the emergency rehabilitation of the Dalton Gardens, Avondale, and Hayden Lake Unit, Rathdrum Prairie Irrigation Projects, Idaho, to be repaid in full under conditions satisfactory to the Secretary of the Interior.

[For an additional amount for advance planning activities on the Canadian River project, Texas, \$300,000: *Provided*, That the limitation under this head in the Interior Department Appropriation Act, 1955, on the amount available toward the emergency rehabilitation of the Crescent Lake Dam project, Oregon, is increased from \$297,000 to \$305,000.] (48 U.S.C. 391, 485, 504; Public Works Appropriation Act, 1961; Second Supplemental Appropriation Act, 1961.)

Note.—Estimate for 1962 excludes \$2,805 thousand for activities transferred in the estimates to "General administrative expenses." The amounts obligated in 1960 and 1961 are shown in the schedule as comparative transfers.

Program and Financing (in thousands of dollars)

	1960 actual	1961 estimate	1962 estimate
<b>Program by activities:</b>			
1. Advance planning .....	123	829	380
2. Gila project, Arizona .....	3,231	3,733	1,460
3. Colorado River front work and levee system, Arizona-California .....	184	1,169	1,390
4. Central Valley project, California .....	42,629	50,032	55,338
5. Collbran project, Colorado .....	4,339	5,163	534

Program and Financing (in thousands of dollars)—Continued

	1960 actual	1961 estimate	1962 estimate
<b>Program by activities—Continued</b>			
6. Avondale, Dalton Gardens and Hayden Lake pipe rehabilitation, Idaho .....		25	
7. Palisades project, Burns Creek Dam and powerplant, Idaho .....			487
8. Wichita project, Cheney division, Kansas .....			1,200
9. Washoe project, Nevada-California .....	756	2,647	968
10. McMillan Delta project, New Mexico .....	72	228	
11. Middle Rio Grande project, New Mexico .....	1,749	1,790	1,825
12. Norman project, Oklahoma .....			900
13. Washita Basin project, Oklahoma .....	8,432	6,938	1,800
14. Rogue River Basin project, Talent division, Oregon .....	2,955	2,557	789
15. The Dalles project, western division, Oregon .....			350
16. Vale project, Bully Creek extension, Oregon .....			690
17. Klamath project, Oregon-California .....	478	928	1,034
18. Canadian River project, Texas .....			1,450
19. Lower Rio Grande rehabilitation project, LaFeria division, Texas .....		500	1,200
20. Lower Rio Grande rehabilitation project, Mercedes division, Texas .....	1,240	2,176	2,291
21. San Angelo project, Texas .....	3,930	11,020	8,034
22. Provo River project, Utah .....	179	1,304	827
23. Weber Basin project, Utah .....	5,007	6,030	8,615
24. Chief Joseph Dam project, Greater Wenatchee division, Washington .....	205	1,740	2,367
25. Columbia Basin project, Washington .....	7,208	4,316	4,340
26. Drainage and minor construction program .....	10,292	8,203	2,262
27. Rehabilitation and betterment of existing projects .....	3,209	3,840	4,039
28. Missouri River Basin:			
(a) Ainsworth unit, Nebraska .....	104	1,660	3,559
(b) Almena unit, Kansas .....		770	3,305
(c) Cedar Bluff unit, Kansas .....	169	1,299	1,493
(d) East Bench unit, Montana .....	318	3,442	5,920
(e) Farwell unit, Nebraska .....	2,486	7,723	5,955
(f) Frenchman-Cambridge division, Nebraska .....	3,329	5,339	3,158
(g) Transmission division (including Fort Peck project) .....	15,482	23,217	20,124
(h) Yellowtail unit, Montana-Wyoming .....	15	2,430	10,840
(i) Drainage and minor construction program .....	9,472	3,829	1,350
(j) Investigations .....	608	882	760
(k) Advance planning .....	1,007	1,466	1,710
Subtotal, Missouri River Basin, Bureau of Reclamation .....	32,990	52,057	58,174
(i) Other Department of the Interior agencies .....	2,593	2,872	3,000
Total, Missouri River Basin .....	35,583	54,929	61,174
29. Prior year balances of advances to chief engineer, Denver, Colo., and centralized project activities in the regional offices .....	250	1,329	
30. Undistributed reduction based on anticipated delays .....			-7,000
Total obligations .....	132,051	171,426	158,744
<b>Financing:</b>			
Comparative transfers to other accounts .....	2,477	2,785	
Unobligated balance brought forward .....	-9,793	-8,043	-577
Recovery of prior year obligations .....			
Unobligated balance carried forward .....	8,043	577	83
New obligational authority .....	132,466	166,745	158,250
<b>New obligational authority:</b>			
Reclamation fund, special fund .....	95,000	90,000	70,000
General fund .....	37,466	76,745	88,250
Appropriation .....	132,466	166,745	158,250

BUREAU OF RECLAMATION—Continued

Current authorizations—Continued

The program consists of advance planning, design, and construction of authorized projects, operation and maintenance during construction of completed features of projects, and rehabilitation of existing facilities. Investigations and advance planning for units of the Missouri River Basin are included under that project.

Work will be continued in 1962 on 27 projects and 19 units and divisions of the Missouri River Basin project started in prior years and construction will be initiated on 5 new projects with estimated costs totaling \$141 million. Three of the five new projects are designed primarily to

provide municipal and industrial water; two will furnish supplemental water for lands now inadequately supplied and also serve some new acreage. Six projects and 2 units of the Missouri River Basin project will be completed in 1962. The program also includes rehabilitation and betterment work on 12 projects. During the year facilities for 91,500 acres of irrigated land and 108,500 kilowatts of new power generating capacity will be completed.

The following workload table summarizes the program goals and accomplishments.

PROGRAM WORKLOAD SUMMARY

[Dollars in millions—acres and kilowatts in thousands]

	Estimated total project cost	Estimated transfers to/from (—) other projects or funds, net	Total estimate of costs to this appropriation	Program accomplished through 1961			1962 program goals		
				Power (kilowatts installed capacity)	Irrigation		Power (kilowatts installed capacity)	Irrigation	
					New acres <sup>1</sup>	Supplemental acres <sup>2</sup>		New acres <sup>1</sup>	Supplemental acres <sup>2</sup>
Completed, June 30, 1960 (77 projects and 5 Missouri River Basin units).....	\$740.8	-----	\$740.8	705.8	2,264.1	2,748.9	-----	-----	-----
Completed, 1961 (11 projects and 2 Missouri River Basin units).....	189.2	-\$1.0	188.2	164.0	20.3	75.9	-----	-----	-----
Inactive, 1962 (1 project and 3 Missouri River Basin units).....	45.6	-----	45.6	1.5	52.5	57.4	-----	-----	-----
Authorization pending (1 project).....	45.4	-0.2	45.2	-----	-----	-----	-----	-----	-----
Under construction, 1962:									
Continuing:									
Central Valley.....	1,105.2	4.2	1,109.4	629.5	34.9	818.8	-----	6.7	-----
Columbia Basin.....	960.5	-35.7	924.8	1,974.0	440.3	-----	-----	10.4	-----
Missouri River Basin:									
Ainsworth.....	26.1	-0.7	25.4	-----	-----	-----	-----	-----	-----
Almena.....	15.4	-0.3	15.1	-----	-----	-----	-----	-----	-----
East Bench.....	21.7	-0.5	21.2	-----	-----	-----	-----	-----	-----
Farwell.....	32.4	-----	32.4	-----	-----	-----	-----	-----	-----
Frenchman-Cambridge Division.....	77.8	-0.6	77.2	-----	43.0	9.6	-----	7.1	-----
Transmission Division.....	330.2	-3.9	326.3	-----	-----	-----	-----	-----	-----
Yellowtail.....	109.3	-1.8	107.5	-----	-----	-----	-----	-----	-----
Weber Basin.....	97.5	-1.7	95.8	5.7	4.6	5.6	-----	6.6	3.6
San Angelo.....	29.0	-0.2	28.8	-----	-----	-----	-----	-----	-----
Other (10 projects and 1 Missouri River Basin unit).....	264.2	-2.3	261.9	16.0	329.0	23.8	-----	28.4	-----
Drainage and minor construction (13 projects and 11 Missouri River Basin units).....	552.9	-11.2	541.7	381.6	1,108.3	-----	-----	12.4	10.9
Total continuing (27 projects and 19 Missouri River Basin units).....	3,622.2	-54.7	3,567.5	3,006.8	1,960.1	857.8	-----	71.6	14.5
Completed:									
Boulder Canyon.....	174.4	-7.7	166.7	1,249.8	-----	-----	95.0	-----	-----
Collbran.....	16.0	-0.3	15.7	-----	1.9	15.3	13.5	.6	4.5
Middle Rio Grande.....	33.8	-2.1	31.7	-----	121.4	-----	-----	.3	-----
Missouri River Basin:									
Glendo.....	43.8	-----	43.8	72.0	-----	37.6	-----	-----	-----
Owl Creek.....	6.0	-0.6	5.4	-----	-----	13.1	-----	-----	-----
Provo River.....	36.4	-0.4	36.0	4.9	-----	46.6	-----	-----	-----
Rio Grande, Elephant Butte power.....	16.7	-0.8	15.9	24.3	-----	-----	-----	-----	-----
Solano.....	38.9	-0.6	38.3	-----	71.9	24.2	-----	-----	-----
Total completed (6 projects, and 2 Missouri River Basin units).....	366.0	-12.5	353.5	1,351.0	195.2	136.8	108.5	0.9	4.5
New project starts:									
Canadian River.....	96.1	-0.8	95.3	-----	-----	-----	-----	-----	-----
Norman.....	19.0	-0.2	18.8	-----	-----	-----	-----	-----	-----
The Dalles, western division.....	5.9	-0.2	5.7	-----	-----	-----	-----	-----	-----
Vale, Bully Creek.....	3.3	-0.2	3.1	-----	-----	-----	-----	-----	-----
Wichita, Cheney division.....	18.3	-0.1	18.2	-----	-----	-----	-----	-----	-----
Total new project starts (5 projects).....	142.6	-1.5	141.1	-----	-----	-----	-----	-----	-----
Total construction (38 projects and 21 Missouri River Basin units).....	4,130.8	-68.7	4,062.1	4,357.8	2,155.3	994.6	108.5	72.5	19.0
Rehabilitation and betterment (work on 12 projects).....	42.0	-0.3	41.7	-----	-----	-----	-----	-----	-----
Grand total, Construction and rehabilitation.....	5,193.8	-70.2	5,123.6	5,229.1	4,492.2	3,876.8	108.5	72.5	19.0

<sup>1</sup> Lands to receive a new full supply of irrigation water.

<sup>2</sup> Additional water supply for irrigated lands now inadequately supplied.

BUREAU OF RECLAMATION—Continued

Current authorizations—Continued

CONSTRUCTION AND REHABILITATION—Continued

Project costs to this appropriation are presented in the following table:

PROGRAM BY ACTIVITIES

[In thousands of dollars]

	Costs to this appropriation					Analysis of 1962 financing			
	Total estimate	To June 30, 1959	1960 actual	1961 estimate	1962 estimate	Deduct selected resources and unobligated balance, start of year	Add selected resources and unobligated balance, end of year	Appropriation required for 1962	Appropriation required to complete
1. Advance planning.....	3,813	2,476	123	829	380	-----	-----	380	5
2. Gila project, Arizona.....	74,586	53,942	2,873	3,811	1,697	347	110	1,460	12,153
3. Colorado River front work and levee system, Arizona-California.....	12,600	6,133	238	1,169	1,390	-----	-----	1,390	3,670
4. Central Valley project, California.....	1,109,424	549,020	45,663	54,354	56,419	752	-329	55,338	404,297
5. Collbran project, Colorado.....	15,685	4,302	4,056	6,580	747	213	-----	534	-----
6. Avondale, Dalton Gardens and Hayden Lake pipe rehabilitation, Idaho.....	1,225	-----	-----	25	-----	-----	-----	-----	1,200
7. Palisades project, Burns Creek Dam and powerplant, Idaho.....	45,154	-----	-----	-----	387	487	100	-----	44,667
8. Wichita project, Cheney division, Kansas.....	18,198	-----	-----	-----	1,145	-----	55	1,200	16,998
9. Washoe project, Nevada-California.....	50,547	387	472	2,908	981	94	81	968	45,718
10. McMillan Delta project, New Mexico.....	1,173	62	72	228	-----	-----	-----	-----	811
11. Middle Rio Grande project, New Mexico.....	31,729	25,849	1,877	2,171	1,832	7	-----	1,825	-----
12. Norman project, Oklahoma.....	18,797	-----	-----	-----	872	-----	28	900	17,897
13. Washita Basin project, Oklahoma.....	37,467	10,892	7,829	8,388	1,906	132	26	1,800	8,426
14. Rogue River Basin project, Talent division, Oregon.....	23,492	16,083	3,554	3,011	811	-27	-49	789	82
15. The Dalles project, western division, Oregon.....	5,680	-----	-----	-----	340	-----	10	350	5,330
16. Vale project, Bully Creek extension, Oregon.....	3,089	-----	-----	-----	679	-----	11	690	2,399
17. Klamath project, Oregon-California.....	19,522	15,088	346	1,088	1,034	28	28	1,034	1,938
18. Canadian River project, Texas.....	95,330	-----	-----	-----	1,450	-----	-----	1,450	93,880
19. Lower Rio Grande rehabilitation project, La Feria division, Texas.....	5,738	-----	-----	490	1,193	10	17	1,200	4,038
20. Lower Rio Grande rehabilitation project, Mercedes division, Texas.....	-10,760	191	826	2,327	2,784	517	24	2,291	4,608
21. San Angelo project, Texas.....	28,816	350	2,103	12,538	8,279	330	85	8,034	5,461
22. Provo River project, Utah.....	35,997	33,674	168	1,316	839	12	-----	827	-----
23. Weber Basin project, Utah.....	95,780	35,932	5,402	8,143	8,636	196	175	8,615	37,492
24. Chief Joseph Dam project, Greater Wenatchee division, Washington.....	7,801	-----	187	1,400	2,700	358	25	2,367	3,489
25. Columbia Basin project, Washington.....	924,790	535,063	6,701	6,368	4,570	1,828	1,598	4,340	370,490
26. Drainage and minor construction program.....	912,377	871,725	9,676	10,981	2,585	547	217	2,255	17,193
27. Rehabilitation and betterment of existing projects.....	46,606	20,507	3,108	4,307	4,048	183	174	4,039	14,462
28. Missouri River Basin:									
(a) Ainsworth unit, Nebraska.....	25,435	377	203	1,639	3,528	127	158	3,559	19,530
(b) Alma unit, Kansas.....	15,121	-----	-----	770	3,305	-----	-----	3,305	11,046
(c) Cedar Bluff unit, Kansas.....	18,301	13,870	170	1,299	1,493	1	1	1,493	1,468
(d) East Bench unit, Montana.....	21,200	-----	220	3,353	5,928	187	179	5,920	11,520
(e) Farwell unit, Nebraska.....	30,783	528	1,869	7,885	6,342	530	143	5,955	14,016
(f) Frenchman-Cambridge division, Nebraska.....	77,160	60,295	3,011	5,966	3,158	545	545	3,158	4,185
(g) Transmission division (including Fort Peck project).....	326,294	127,514	14,759	25,705	21,369	1,582	337	20,124	136,610
(h) Yellowtail unit, Montana-Wyoming.....	107,491	2,886	39	1,681	10,075	790	1,555	10,840	91,255
(i) Drainage and minor construction program.....	341,612	253,887	11,231	6,777	1,365	54	39	1,350	68,313
(j) Investigations.....	55,825	43,722	605	890	761	62	61	760	10,786
(k) Advance planning.....	23,114	12,799	1,191	1,478	1,712	87	85	1,710	5,849
Subtotal, Missouri River Basin, Bureau of Reclamation.....	1,043,336	515,878	33,298	57,443	59,036	3,965	3,103	58,174	374,578
(l) Other Department of the Interior agencies.....	58,508	50,043	2,531	2,934	3,000	-----	-----	3,000	-----
Total, Missouri River Basin.....	1,101,844	565,921	35,829	60,377	62,036	3,965	3,103	61,174	374,578
29. Adjustment in cost—prior year balance of advances to chief engineer, Denver, Colo., and centralized project activities in the regional offices.....	-----	-----	54	1,525	-----	-----	-----	-----	-1,579
30. Undistributed reduction in program costs reflected in undelivered orders.....	-----	-----	-----	-10,000	-----	10,000	10,000	-----	-----
31. Undistributed reduction based on anticipated delays.....	-----	-----	-----	-----	-7,000	-----	-----	-7,000	7,000
Total program costs.....	4,738,020	2,747,597	131,157	184,334	162,740	19,979	15,489	158,250	1,496,703
32. Relation of costs to obligations:									
Costs financed from obligations of other years, net (-).....	-----	-----	-----	-12,908	-3,996	-----	-----	-----	-----
Obligations incurred for costs of other years, net.....	-----	-----	894	-----	-----	-----	-----	-----	-----
Total obligations.....	-----	-----	132,051	171,426	158,744	-----	-----	-----	-----

<sup>1</sup> Represents total cost to June 30, 1962.

**BUREAU OF RECLAMATION—Continued**

**Current authorizations—Continued**

32. *Relation of costs to obligations.*—The relationship is derived from year-end balances of selected resources and applicable adjustment as reflected in the following table (in thousands of dollars):

	1959 actual	1960 actual	1961 estimate	1962 estimate
Selected resources at end of year: Inventories and items on order:				
Stores (goods unconsumed by projects).....	1,081	741	602	589
Unpaid undelivered orders (appropriation balances obligated for goods and services on order not yet received).....	20,803	26,168	13,531	10,000
Service facilities (acquisition value of facilities less depreciation charged to project cost).....	9,419	5,029	4,857	4,380
Deferred charges (investigations of abandoned or unprogramed works, operation and maintenance during construction, and investments).....	424	372	412	437
Total selected resources at end of year.....	31,728	32,310	19,402	15,406
Selected resources at start of year (—).....		—31,728	—32,310	—19,402
Adjustment due to recovery of prior year obligations.....		312		
Costs financed from obligations of other years, net (—).....			—12,908	—3,996
Obligations incurred for costs of other years, net.....		894		

**Object Classification (in thousands of dollars)**

	1960 actual	1961 estimate	1962 estimate
<b>BUREAU OF RECLAMATION</b>			
11 Personnel compensation:			
Permanent positions.....	20,798	23,416	22,656
Positions other than permanent.....	345	285	272
Other personnel compensation.....	769	774	552
Total personnel compensation.....	21,913	24,475	23,480
12 Personnel benefits.....	1,468	2,003	1,944
21 Travel and transportation of persons.....	944	1,042	1,039
22 Transportation of things.....	314	344	313
23 Rent, communications, and utilities.....	489	549	512
24 Printing and reproduction.....	158	208	170
25 Other services.....	1,548	5,090	7,485
Services of other agencies.....	333	312	329
26 Supplies and materials.....	1,554	2,208	2,245
31 Equipment.....	1,345	1,515	1,320
32 Lands and structures.....	98,988	130,651	116,322
33 Investments and loans.....	95	78	74
41 Grants, subsidies, and contributions.....	14	13	10
42 Insurance claims and indemnities.....	157	40	20
44 Refunds.....	16	12	12
Subtotal.....	129,355	168,540	155,275
Deduct quarters and subsistence charges.....	180	174	195
Total, Bureau of Reclamation.....	129,155	168,366	155,080
<b>ALLOCATION ACCOUNTS</b>			
11 Personnel compensation:			
Permanent positions.....	606	703	793
Positions other than permanent.....	38	40	43
Other personnel compensation.....	8	6	3
Total personnel compensation.....	652	749	839
12 Personnel benefits.....	42	53	58
21 Travel and transportation of persons.....	76	86	88
22 Transportation of things.....	6	4	5
23 Rent, communications, and utilities.....	9	13	10
24 Printing and reproduction.....	7	11	11
25 Other services.....	1,786	1,958	2,040
Services of "Revolving fund, Corps of Engineers—Civil".....		3	16
26 Supplies and materials.....	21	36	44
31 Equipment.....	4	5	6
32 Lands and structures.....	293	142	547
Total allocation accounts.....	2,896	3,060	3,664
Total obligations.....	132,051	171,426	158,744

**Object Classification (in thousands of dollars)—Continued**

	1960 actual	1961 estimate	1962 estimate
Obligations are distributed as follows:			
Bureau of Reclamation.....	129,155	168,366	155,080
Bureau of Sport Fisheries and Wildlife.....	225	260	280
Geological Survey.....	1,639	1,798	1,880
Bureau of Indian Affairs.....	173	193	196
Bureau of Land Management.....	201	228	250
Bureau of Mines.....	122	133	140
National Park Service.....	233	260	254
Corps of Engineers—Civil.....	303	188	664

**Personnel Summary**

<b>BUREAU OF RECLAMATION</b>			
Total number of permanent positions.....	4,071	4,141	3,948
Full-time equivalent of other positions.....	81	74	66
Average number of all employees.....	3,419	3,660	3,570
Number of employees at end of year.....	3,591	3,707	3,684
Average GS grade.....	7.5	7.5	7.5
Average GS salary.....	\$6,223	\$6,667	\$6,708
Average salary of ungraded positions.....	\$5,500	\$5,705	\$5,788
<b>ALLOCATION ACCOUNTS</b>			
Total number of permanent positions.....	120	121	137
Full-time equivalent of other positions.....	6	6	7
Average number of all employees.....	105	109	125
Number of employees at end of year.....	111	115	131
Average GS grade.....	7.6	7.6	7.6
Average GS salary.....	\$6,059	\$6,562	\$6,594
Average salary of ungraded positions.....	\$5,194	\$5,317	\$5,342



OFFICIAL ESTIMATE FORM

Form #1-1 13-571 Bureau of Reclamation	Project: <u>BIG RIVER</u>	Official Estimate	Date of Estimate: <u>July 1, 1907</u>	Sheet <u>2</u> of <u>12</u>						
Prepared by: <u>E. F. Brown</u>	Approved by: <u>John Jones</u>	(Prog. Eng.)	(Constr. Eng.)							
Cost Classification	Description	Quantity	Unit Cost	Total Estimate	Labor and materials by contractor	Materials and Supplies by Govt.	Labor by Government Forces	Service Facilities	Investigations, Engineering and Other Costs	Previous Official Estimate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
01.01	<b>SMITH DAM AND RESERVOIR</b>			9,300,000	5,894,000	1,980,032	250,968	180,000	995,000	9,000,000
.30	Land	7.218 Ac.		123,000	110,000	-	-	1,000	12,000	150,000
.31	County Road Relocation - 18' Conc.	2.7 Mi.		441,000	383,000	10,000	-	8,000	40,000	350,000
.32	Reservoir Clearing	10,000 Ac.		262,500	235,000	-	-	500	27,000	200,000
	Less: Credit from sale of timber			-50,000	-	-50,000	-	-	-	-50,000
.33	Gaging and Recording Equipment			12,200	-	7,000	3,500	500	1,200	12,200
.34	Grouting and Sealing Reservoir			124,000	73,000	16,000	22,000	2,000	11,000	124,000
.35	Dam - Gravity Conc., 220'x2096', 750,000 A.F.; 2 - 4'x8' slide gate outlets; 4 - 20'x40' tailrace crest gates; spillway bridge			7,460,000	4,651,000	1,720,032	152,968	130,400	805,600	7,573,500
.36	Channel Rectification and Riprap			894,000	430,000	260,000	72,000	37,000	95,000	894,000
.48	Misc. Equip. - derrick barge and patrol tug			18,400	-	16,000	500	100	1,800	18,400
.50	Dam and Res. access road, 18" mac.	0.56 Mi.		14,900	12,800	1,000	-	500	1,400	14,900
02.01	<b>PINEVILLE DIVERSION DAM</b>			1,625,000	1,341,000	72,000	65,000	31,000	116,000	1,800,000
	32'x450' concrete overflow incl. east side headworks for main canal, 2 - 15'x10' radial inlet gates and elec. hoists									
.30	Land	700 Ac.		70,000	70,000	-	-	-	-	70,000
.33	Gate tender's residence and garage			22,000	16,000	3,000	-	1,000	2,000	0
.35	Dam and Reservoir			1,515,500	1,254,500	67,000	61,000	24,000	110,000	1,680,000
.50	Gravel access road - grading, drainage	1.65 Mi.		16,500	500	2,000	4,000	6,000	4,000	50,000
151	<b>TOTAL CONSTRUCTION COST</b>			49,382,000	39,984,000	12,243,032	990,968	844,700	5,310,000	50,000,000
	<b>TRANSITIONAL DEVELOPMENT (Detail as directed)</b>			75,000	-	-	-	3,000	72,000	0
	<b>TOTAL PROJECT COST</b>			49,457,000	39,984,000	12,243,032	990,968	847,000	5,382,000	50,000,000









PROJECT DATA SHEET

PF-65 (7-58) BUREAU OF RECLAMATION		<b>PROJECT DATA SHEET</b>			
LOCATION <u>Big River Basin--North central Utah in Beaver and Emory Counties. The project works extend south from Smith Dam to lands including the Town of Pineville.</u>					
AUTHORIZATION <u>Act of December 12, 1952</u>			B C RATIO <u>1.5</u>		Date <u>Jan. 1, 19CY</u>
LAND CERTIFICATION <u>By Secretary 4/18/PY</u>		DEFINITE PLAN REPORT <u>Approved by Commissioner 4/30/PY</u>			
<b>SUMMARIZED FINANCIAL DATA</b>					
Total Federal Obligations <u>\$ 49,363,584</u>		Appropriations to June 30, 19PY <u>\$ 7,999,106</u>			
Net Property and Other Transfers <u>-66,584</u>		Appropriations for F. Y. 19CY <u>9,000,000</u>			
Cash Advances--Non-Federal <u>160,000</u>		Appropriations to Date <u>16,999,106</u>			
Total Project Cost <u>\$ 49,457,000</u>		Appropriations Required for F.Y. 19BY <u>13,136,000</u>			
		Balance to Complete after F. Y. 19BY <u>\$19,228,478</u>			
<b>ALLOCATIONS</b>		<b>REPAYMENT</b>		<b>AMOUNTS PER ACRE</b>	
Irrigation <u>\$18,500,000</u>	Amount Repaid by Irrigators <u>\$17,600,000</u>	Irrig. Invest. per Acre <u>\$ 154</u>	Payment Capacity per Acre <u>\$ 2.15</u>		
Power <u>30,757,000</u>	Amount Repaid by Power <u>31,657,000</u>	Repayment of Investment per Acre:	Annual Charges:		
M. & I. Water <u>1,300,000</u>	Amount Repaid by M. & I. Water <u>                    </u>	By Irrigators <u>\$ 147</u>	O. & M. <u>\$ .50</u>		
Flood & Nav. <u>500,000</u>		By Power Revenues <u>7</u>	Construction <u>1.50</u>		
Recreation <u>                    </u>		By M & I Water Users <u>                    </u>	Total <u>2.00</u>		
Total <u>\$51,057,000<sup>1/</sup></u>	Non-Reimbursable <u>1,800,000</u>	Total <u>\$ 51,057,000</u>			
STATUS OF REPAYMENT CONTRACT: <u>Contract executed with Metropolis Water Users for \$0,000,000 for payment of construction costs of the Gravity Division. Negotiations in process for the execution of a repayment contract in the second quarter of 19BY covering construction costs of the Pump Division system.</u>					
<b>PRINCIPAL FEATURES</b>					
	Size or Cap.	% Complete 6-30-CY		Size or Cap.	% Complete 6-30-CY
<u>Smith Dam and Reservoir</u>	<u>750,000 A.F.</u>	<u>61</u>	<u>Big River Powerplant &amp; Switch- yard</u>	<u>100,000 KW</u>	<u>32</u>
<u>Pineville Diversion Dam</u>	<u>32 x 450 Ft.</u>	<u>2</u>	<u>Big River-Metropolis 161-kv Trans. Line</u>	<u>90 Mi.</u>	<u>9</u>
<u>Gravity Main Canal, 2,000 cfs</u>	<u>15.5 Mi.</u>	<u>6</u>	<u>Big River-Pineville Pumping Plant 34.5-kv Trans. Line</u>	<u>10.9 Mi.</u>	<u>1</u>
<u>Gravity Division Laterals</u>	<u>70,000 Acres</u>	<u>8</u>	<u>General Property</u>	<u>-</u>	<u>-</u>
<u>Pineville Pumping Plant, 800 cfs</u>	<u>8,000 HP</u>	<u>2</u>	<u>Bear Creek Recreational De- velopment</u>	<u>-</u>	<u>-</u>
<u>High Lift Canal, 800 cfs</u>	<u>14.6 Mi.</u>	<u>2</u>			
<u>Pump Division Laterals</u>	<u>50,000 Acres</u>	<u>1</u>			
<u>Drainage System</u>	<u>120,000 Acres</u>	<u>3</u>			
<u>Development Farm</u>	<u>1 Farm</u>	<u>-</u>			
Acreage Full Supply <u>120,000</u>		Supplemental Supply <u>- -</u>	Total Acres <u>120,000</u>	Power kw <u>100,000</u>	
Region <u>9</u>	Date <u>August 1, 19CY</u>	Project and State <u>Big River, Utah</u>			

"Total Federal Obligations" and "Cash Advances--Non-Federal" will agree with "Total Obligations" on Form PF-2 or PF-40.

This entry will show allocation of new funds only.

Total of these entries must agree with "Total Federal Obligations."

Difference between these entries will be explained in a footnote.

<sup>1/</sup>Excludes \$400,000 for storage assigned to Little River Project, Utah, and includes \$2,000,000 in power allocation for interest during construction.



NARRATIVE JUSTIFICATION

Appropriation Title: Construction and Rehabilitation

BIG RIVER PROJECT, UTAH

**Justification:** This is a multipurpose project which will provide a full water supply for the irrigation of 120,000 acres of semiarid land in the central section of the State of Utah, and a power supply of 100,000 kilowatts, along with flood control and recreation benefits.

Work Proposed, F. Y. 19BY:

Smith Dam and Reservoir, \$2,960,000. The program provides for the substantial completion of Smith Dam and Reservoir and the initiation of storage by the end of the fiscal year. Placing of concrete in the main structure of the dam will be about 95 percent complete and work will be well under way on the overflow spillway in the left abutment. Relocation of the county road, clearing of the first section of the reservoir, and construction of the spillway stilling basin will be completed. A contract will be awarded and work completed on the second schedule of the reservoir clearing.

Pineville Diversion Dam, \$220,000. The program provides for the acquisition of rights-of-way, collection of detailed design data, preparation of final designs and start of construction on the dam. In addition supply contracts will be awarded late in the fiscal year for the purchase of radial gates and hoists.

Gravity Main Canal, \$450,000. Acquisition of rights-of-way will continue and contracts will be awarded for construction of the earthwork and structures in the second quarter.

Gravity Division Laterals, \$800,000. Award of contract for construction of Unit No. 1 will be made early in the fiscal year and for Unit No. 2 in the last quarter of the fiscal year.

High Lift Canal, \$10,000. Collection of design data will be continued looking toward award of construction contracts in fiscal year 19BY+2.

Pump Division Laterals, \$50,000. Collection of design data will continue during the year with construction scheduled for 19BY+3.

Drainage System, \$15,000. Collection of design data will continue during the year with construction scheduled for 19BY+3.

Big River Powerplant, \$7,100,000. Work will continue under the prime contract awarded in fiscal year 19PY-1, with initial power generation from the first and second units at the end of fiscal year 19BY+1.

NARRATIVE JUSTIFICATION

SCHEDULE OF CONSTRUCTION PROGRAM

FORM PF-40  
(AUGUST 1961)  
BUREAU OF RECLAMATION

August 1, 19CY

SCHEDULE OF CONSTRUCTION PROGRAM FISCAL YEARS 19CY AND 19BY

BIG RIVER PROJECT, UTAH

The detail of these columns shall be identical to the detail shown on Form PF-2, Control Schedule, up to and including the line-entry "Total obligations."

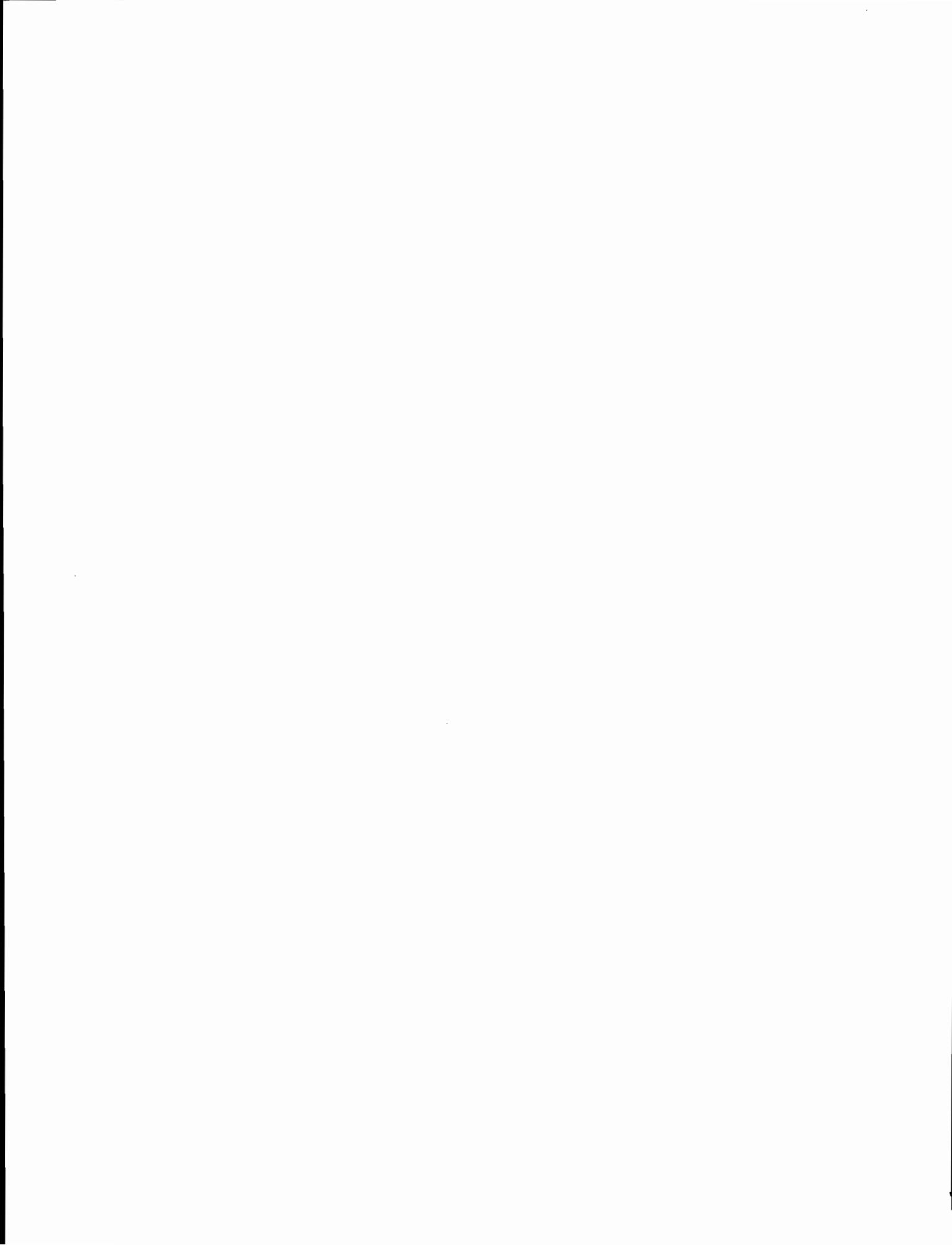
The detail of this column shall be identical to the algebraic sum of Columns 9 to 14, inclusive, on Form PF-2, Control Schedule, up to and including the line-entry "Total obligations."

Program Item	Estimated Total	Total to June 30 19PY	Program Current Year 19CY	Program Budget Year 19BY	Balance to Complete
1	2	3	4	5	6
<b>Construction Program</b>					
Smith Dam and Reservoir . . . . .	\$ 9,300,000	\$2,026,777	\$3,630,475	\$ 2,960,000	\$ 682,748
Pineville Diversion Dam . . . . .	1,625,000	5,760	25,000	220,000	1,374,240
Gravity Main Canal, 2,000 cfs . . . . .	2,450,000	33,849	105,000	450,000	1,861,151
Gravity Division Laterals . . . . .	3,015,000	66,907	165,000	800,000	1,983,093
Pineville Pumping Plant . . . . .	860,000	12,014	2,400	.....	845,586
High Lift Canal, 800 cfs . . . . .	1,225,000	.....	22,100	10,000	1,192,900
Pump Division Laterals . . . . .	2,265,000	27,500	.....	50,000	2,187,500
Drainage System . . . . .	90,000	.....	3,000	15,000	72,000
Development Farm . . . . .	40,000	.....	.....	.....	40,000
Big River Powerplant . . . . .	22,200,000	3,005,016	4,600,000	7,100,000	7,494,984
Big River Switchyard . . . . .	1,310,000	.....	17,500	300,000	992,500
Big River-Metropolis 161-kv Transmission Line . . . . .	4,500,000	109,121	300,000	1,850,000	2,240,879
Big River-Pineville Pumping Plant 34.5-kv Transmission Line . . . . .	335,000	.....	3,000	100,000	232,000
General Property . . . . .	122,000	.....	.....	60,000	62,000
Bear Creek Recreation Development . . . . .	45,000	.....	.....	.....	45,000
<b>Total Construction Cost . . . . .</b>	<b>49,382,000</b>	<b>5,286,914</b>	<b>8,873,475</b>	<b>13,915,000</b>	<b>21,306,581</b>
<b>Other Project Costs . . . . .</b>	<b>75,000</b>	<b>.....</b>	<b>.....</b>	<b>5,000</b>	<b>70,000</b>
<b>Total Project Cost . . . . .</b>	<b>49,457,000</b>	<b>5,286,944</b>	<b>8,873,475</b>	<b>13,920,000</b>	<b>21,376,581</b>
<b>Adjustments . . . . .</b>	<b>-93,416</b>	<b>-108,416</b>	<b>-10,000</b>	<b>-110,000</b>	<b>135,000</b>
<b>Total Cost to Appropriation . . . . .</b>	<b>49,363,584</b>	<b>5,178,528</b>	<b>8,863,475</b>	<b>13,810,000</b>	<b>21,511,581</b>
<b>Other Expenditures and Credits . . . . .</b>	<b>160,000</b>	<b>903,103</b>	<b>-70,000</b>	<b>-40,000</b>	<b>-633,103</b>
<b>Total Expenditures . . . . .</b>	<b>49,523,584</b>	<b>6,081,631</b>	<b>8,793,475</b>	<b>13,770,000</b>	<b>20,878,478</b>
<b>Undelivered Orders . . . . .</b>	<b>.....</b>	<b>469,916</b>	<b>480,084</b>	<b>700,000</b>	<b>-1,650,000</b>
<b>Total Obligations . . . . .</b>	<b>49,523,584</b>	<b>6,551,547</b>	<b>9,273,559</b>	<b>14,470,000</b>	<b>19,228,478</b>
<b>Method of Financing:</b>					
Appropriation, F.Y. 19CY . . . . .	.....	.....	\$9,000,000	.....	.....
Advances--Non-Federal . . . . .	.....	.....	.....	\$ 160,000	.....
Application of Prior Year Funds . . . . .	.....	.....	1,447,559	1,174,000	.....
Balance available in subsequent year . . . . .	.....	.....	-1,174,000	.....	.....
Appropriations required . . . . .	.....	.....	.....	13,136,000	\$19,228,000

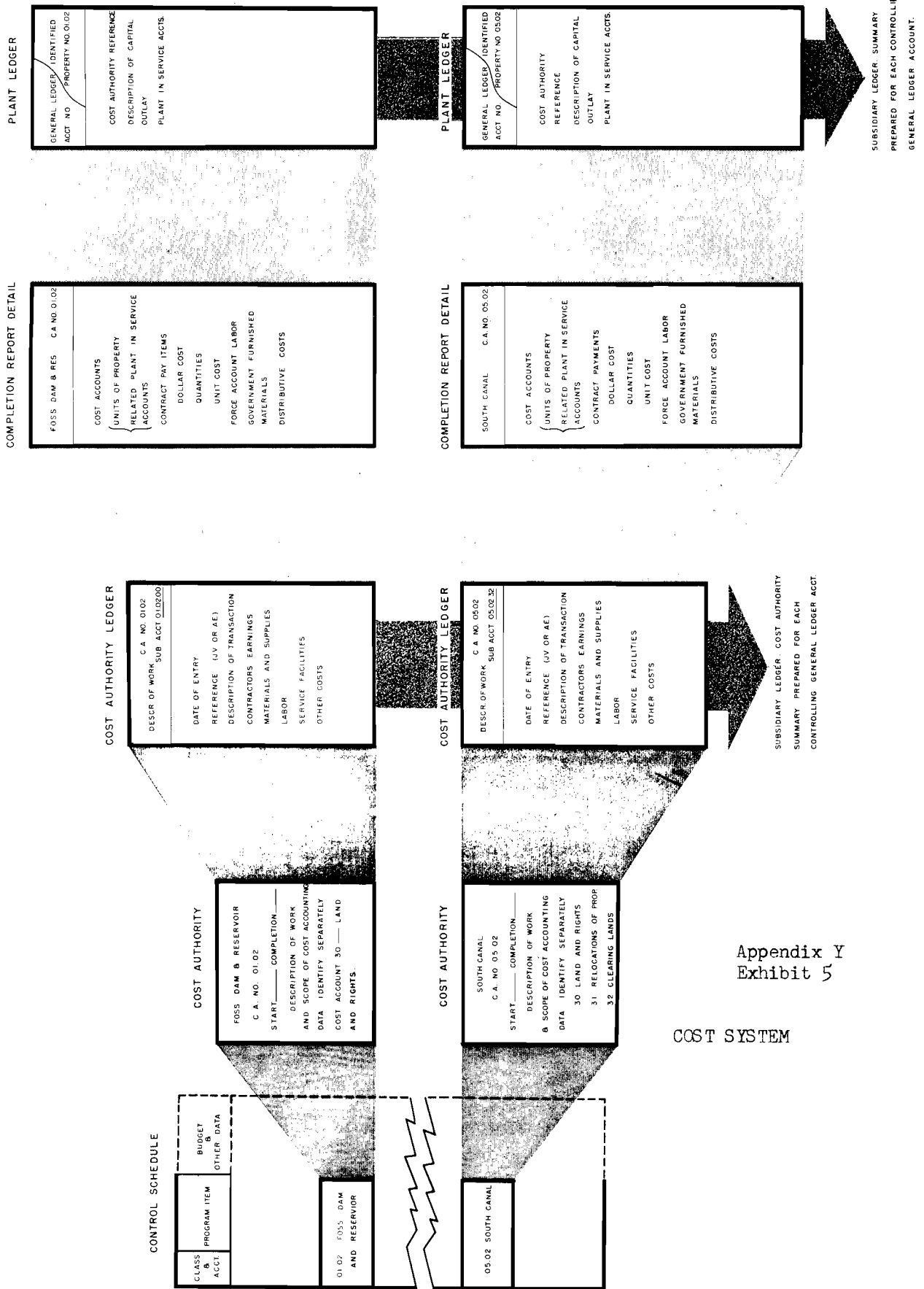
These totals shall be in agreement with the respective columns on Form PF-2, Control Schedule, Column 6 being the algebraic sum of Columns 9 to 14, inclusive. Columns 2, 3, 4, 5, and 6 shall be in agreement with the line-entries "Estimated Total Obligations," "Total Obligations to June 30, 19PY," "Total Obligations 19CY," "Total Obligations 19BY," and "Balance to Complete," respectively, on the summarized Financial Data on the project data sheets.

These amounts shown in Columns 4 and 5 shall be in agreement with similar line-entries for the respective years on the Program and Financing schedule, less contributions, if any.

These amounts shall be rounded off to the nearest thousand dollars.



# COST ACCOUNTING FOR THE PERFORMANCE OF BUDGETED WORK



Appendix Y  
Exhibit 5  
  
COST SYSTEM

COST SYSTEM

COST ACCOUNT REPORT

FORM PF-25  
(3-55)  
BUREAU OF RECLAMATION

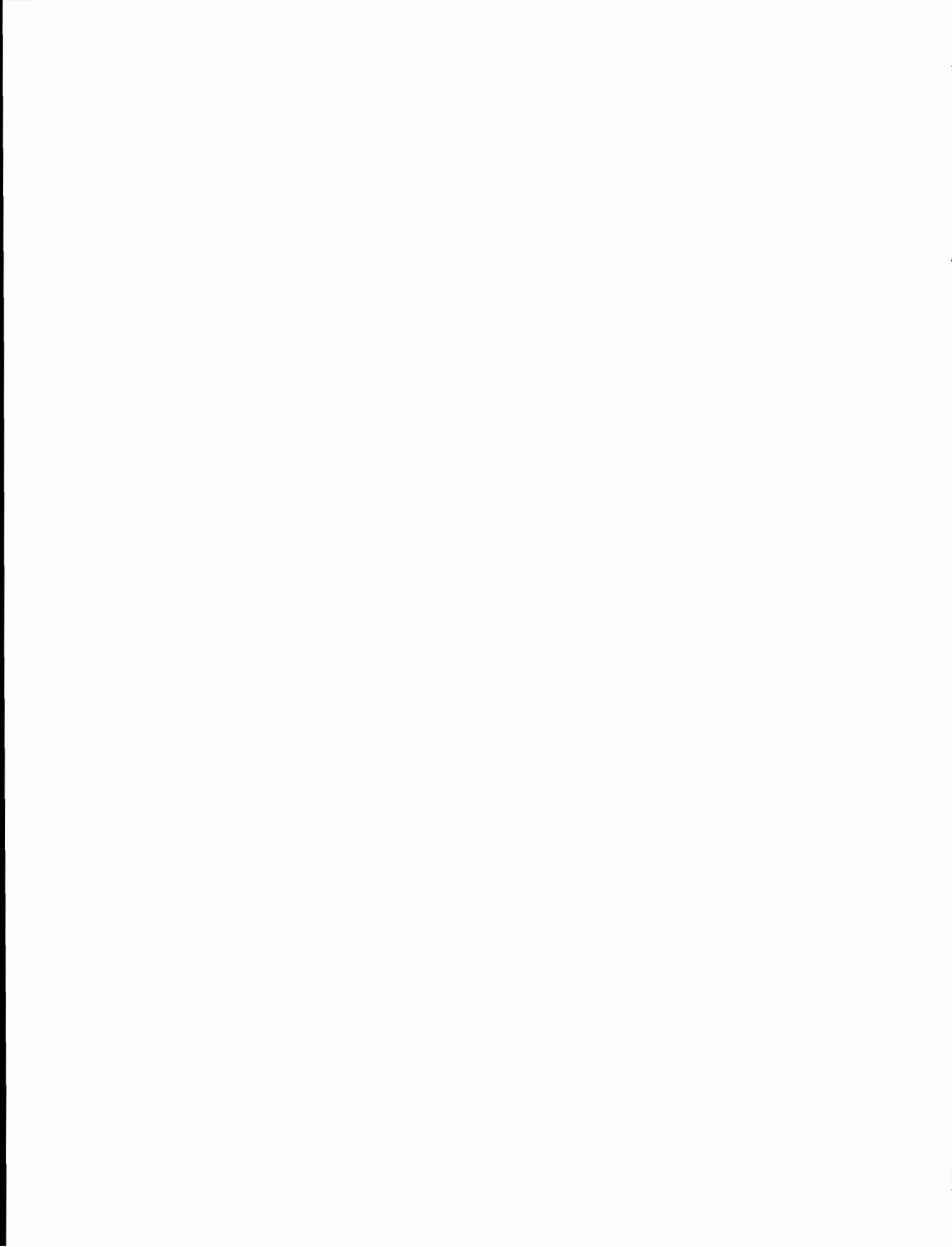
COST AUTHORITY SUMMARY

SHEET NO. 1 OF 1

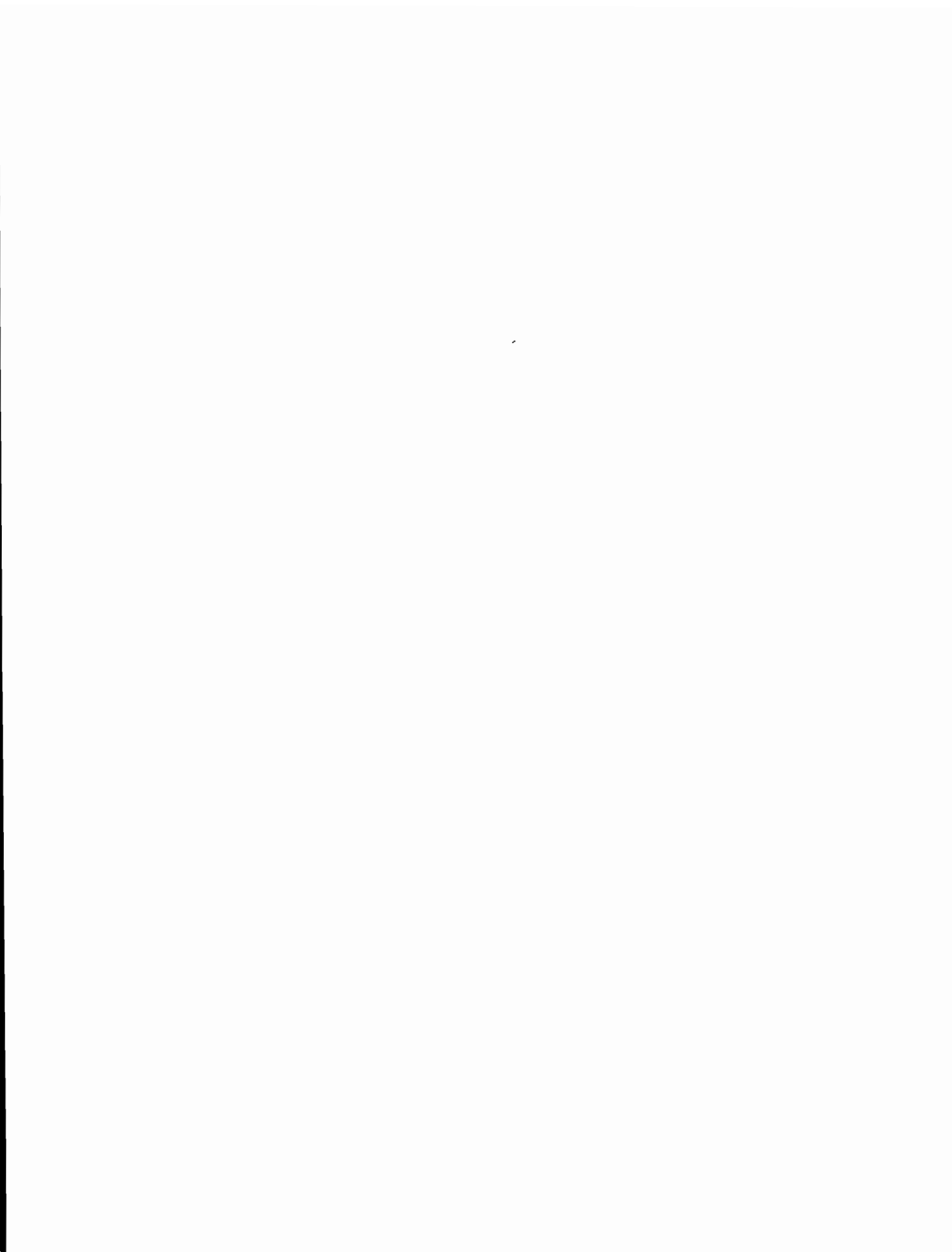
PROJECT OR UNIT Big River

MONTH ENDING June 30, 1954

COST AUTHORITY AND SUB-ACCOUNT NO.	DESCRIPTION	TOTAL COSTS				DETAIL COSTS - CUMULATIVE				
		THIS MONTH	FISCAL YEAR TO DATE	ADJUSTMENTS AND TRANSFERS	TOTAL TO DATE	CONSTRUCTION CONTRACTS	MATERIALS AND SUPPLIES	LABOR	SERVICE FACILITIES	OTHER COSTS
1	2	3	4	5	6	7	8	9	10	11
01.01	Smith Dam and Reservoir									
.30	Land and Rights	\$ 856 72	\$ 12 567 94		\$ 101 327 54	\$ 80 048 76				\$ 21 278 78
.00	All Other	245 089 71	2946 948 41		5 944 075 17	4287 949 47	\$ 370 376 43		\$ 44 649 15	1 241 100 12
	Subtotal	245 946 43	2959 516 35		6 045 402 71	4367 998 23	370 376 43		44 649 15	1 262 378 90
05.01	Gravity Main Canal									
.30	Land and Rights	974 68	7 395 40		55 620 24	43 939 99				11 680 25
.00	All Other	305 571 28	2281 839 77		4 756 324 56	3348 208 07	330 101 33		56 789 20	1 021 225 96
	Subtotal	306 545 96	2289 235 17		4 811 944 80	3392 148 06	330 101 33		56 789 20	1 032 906 21
05.02	South Canal									
.30	Land and Rights		747 82		8 978 58	7 326 58				1 652 00
.31	Relocations of Existing Property - Farm Blds. in South Area (Force Acct.)	128 42	1 437 62		12 371 62		110 32	\$ 6 955 82	2 831 16	2 474 32
.32	Clearing Lands - South Area (Force Account)		1 240 36		8 540 26		74 20	6 221 18	622 23	1 622 65
.00	All Other	153 073 68	1141 575 41		1 292 499 74	948 567 11	83 918 58		10 753 41	249 260 64
	Subtotal	153 202 10	1145 001 21		1 322 390 20	955 893 69	84 103 10	13 177 00	14 206 80	255 009 61
11.01	Big River Powerplant									
.30	Land and Rights	128 72	128 72		15 001 96	11 908 55				3 093 41
.00	All Other	652 289 71	3 569 719 10		5 235 593 73	2 511 721 09	1 678 873 39		34 251 91	1 010 747 34
	Subtotal	652 418 43	3 569 847 82		5 250 595 69	2 523 629 64	1 678 873 39		34 251 91	1 013 840 75
13.01	Big River - Metropolis 169-kv Trans. Line	202 618 25	1 025 310 49		1 025 310 49	814 026 90	1 751 36		6 752 75	202 779 48
13.02	Big River Switchyard	94 628 52	847 324 60		1 480 625 80	1 153 616 06	2 436 72		13 641 60	310 931 42
13.03	Pineville Substation	33 788 60	889 628 72		1 050 320 06	128 740 37	642 853 60		5 642 87	273 083 22
	Total, Account 108.1	1 689 148 29	12 725 864 36		20 986 589 75	13 336 052 95	3 110 495 93	13 177 00	175 934 28	4 350 929 59







FUND REPORT

7-1674  
(7-60)

FORECAST OF UTILIZATION OF CONSTRUCTION FUNDS, F. Y. 1960

FROM January 1, 1960 TO June 30, 1960

APPROPRIATION TITLE CONSTRUCTION AND REHABILITATION Symbol: 14X0661

Line No.	Col. (A)	Col. (B)
1. UNOBLIGATED BALANCE AS OF <u>December 31, 1959</u>		<u>\$4,483,511</u>
2. LESS SCHEDULED NEW OBLIGATIONS REMAINDER F. Y. FOR:*		
3. (a) <u>Land and Land Rights</u> .....	<u>\$ 159,000</u>	
4. (b) <u>New Construction Contract Awards</u> .....	<u>2,088,252</u>	
5. (c) <u>New Material and Supply Contract Awards</u> .....	<u>879,222</u>	
6. (d) <u>Additional Reservations for Contracts In Force</u> .....	<u>913,000</u>	
7. (e) <u>General Expenses:</u>		
8. (1) <u>Operating Office(s)</u> .....	<u>190,000</u>	
9. (2) <u>Regional CPA</u> .....	<u>40,000</u>	
10. (3) <u>Denver Services to Projects</u> .....	<u>85,000</u>	
11. (f) <u>Other</u> .....	<u>58,000</u>	
12. TOTAL NEW OBLIGATIONS (Line 3 thru Line 11) .....		<u>4,412,474</u>
13. UNOBLIGATED BALANCE JUNE 30 (Line 1 less Line 12 but not less than 0) .....		<u>71,037</u>
14. ADDITIONAL ALLOTMENT REQUIRED (Excess of Line 12 over Line 1) .....		<u>0</u>
15. REMARKS: *(See attached Supporting Statements).		

Prepared E. G. Brown (Title: Programs Officer) Approved J. W. Williams (Title: Project Manager) Date 12/31/59

Office Pineville, Utah (Project(s), Unit or other) Project Big River Project (or-other a/c entity) Region 9

