WATER RESOURCE POLICIES AND AUTHORITIES

Water Supply Storage in Corps of Engineers' Projects

1. Purpose and Scope. The manual prescribes policies for the inclusion of municipal and industrial water supply in reservoir projects under the jurisdiction of the Chief of Engineers. It is applicable to all elements of the Corps of Engineers performing civil works functions.

2. References.

a. EM 1120-2-101, Survey Investigations and Reports, General Procedures, particularly paragraphs 1-78c, 1-82d, 1-144.

b. Water Supply Act of 1958 (Title III of Public Law 85-500), approved 3 July 1958, as amended by the Federal Water Pollution Control Act Amendments of 1961, Public Law 87-88, 20 July 1961 (See Appendix IV).

c. EM 1165-2-112, Water Resource Policies and Authorities, Streamflow Regulations for Water Quality Control.

3. Rescission. EM 1165-2-105, 7 Sep 60.

4. Water Supply Act of 1958. The Congress in this Act provides a general policy for considering water supply in Civil Works projects including submission of new projects to Congress and modification of authorized projects to include water supply. Water supply is considered the primary responsibility of State and local interests, but Federal water resources projects should be planned in cooperation with responsible State and local interests so that water supply may be fully considered and provisions therefor included to the maximum extent practical consistent with sound engineering and economic principles.

5. Applicability.

a. The Water Supply Act of 1958 is applicable to all Civil Works reservoir projects provided, however, in those cases in which contracts have been executed under specific provisions of the authorizing act or other authorities, modification of the contract in accordance with the provisions of the Water Supply Act of 1958 will be permissible only if (a) water is not being delivered under the contract and (b) there is mutual consent to the modification. Approval of the Chief of Engineers will be required prior to making commitments to modify these contracts. In cases

where contracts have not been entered into, the contracts shall be made in accordance with the Water Supply Act of 1958.

b. Application of the Water Supply Act of 1958 will be limited to municipal and industrial water supply and the term "water supply" as used herein is intended to refer to those purposes.

6. Water Supply Services to be Provided. These will normally consist of space in a reservoir for use in regulating the flow of water so that it is useful for water supply purposes, and the provision, where necessary, of facilities in the project structures to provide for the release or withdrawal of stored water for water supply purposes. Facilities for the conveyance of water to distribution points shall be considered as outlined in paragraph 16.

7. Water Rights.

a. Water rights necessary for the use of the stored water will not be acquired by the Corps of Engineers but will be obtained as necessary by the water users. The Corps of Engineers should not become involved in resolving conflicts among water users over the right to use stored water for water supply purposes, but will look to responsible State agencies to resolve such conflicts. Where more than one user is involved in the same project, it is desirable that arrangements be made with a single agency, if practicable, for payment and use of the entire water supply storage.

b. Possible encroachment of the operation of water supply storage on the lawful water uses in the downstream areas will be carefully considered and fully coordinated with the responsible local interests as well as with the State agency responsible for the administration of water rights and water laws. The local interests contracting for the use of the water supply storage will be required to hold the Government harmless from liability for or on account of any claim for damages which may be made or asserted as the result of the storage and withdrawal of water by the user and they will be required to use the water in a manner consistent with Federal and State laws.

8. Water Supply Storage.

a. Timely consideration will be given to the inclusion of water supply at reservoir projects to provide as full development of the water resources as practical so as not to preclude the future or expanded use of the reservoirs for water supply, since reservoir sites are becoming increasingly limited in many parts of the country.

b. The project may include provision for water supply for both immediate use (present demand storage) and future use (future demand storage). The inclusion of water supply storage should be based on sound engineering and economic principles of project formulation.

c. During the survey and early planning stages local interests shall furnish reasonable assurances that they will use and make demands for use of storage for water supply, and pay the costs allocated thereto, in accordance with the provisions of the Water Supply Act of 1958, as amended.

d. When State or local interests contemplate using water supply storage upon completion of construction, such interests are required, prior to the initiation of construction, to agree to pay the cost of present demand storage and other water supply provisions necessary to permit such immediate use. A contract, prior to initiation of construction, is considered the best form of the required agreement. Negotiation of a contract should be completed insofar as practical during the period of preconstruction planning so that the contract can be processed promptly after construction funds become available.

e. The contract for use of present demand storage and other facilities, as set forth above, should be accompanied by assurances for future demand storage as set forth in subparagraph 9d. An Exhibit should be attached to the assurances showing the estimated schedule when progressive increments of future demand storage in the project are expected to be placed in service (see subparagraph 9c). The details for computation of the various elements of costs to be borne by local interests as well as the current estimates thereof, for both present and future demand storage and services should be forwarded with the contract and assurances.

f. Planning for water supply in connection with projects to be constructed by the Corps of Engineers should be fully coordinated with responsible State agencies, local interests concerned, and other agencies who may be able to assist in this specialized field (see paragraph 20). In particular, the advice and assistance of the Public Health Service should be obtained (see subparagraph 20c and Appendix I). The views of those agencies and interests should accompany reports submitted to the Chief of Engineers.

9. Special Provisions for Future Water Supply. Future demand storage and other facilities may be recommended to meet anticipated future needs, subject to the following provisions:

a. Recommendations for providing for future demand storage and related facilities will be supported by information demonstrating that it is more economical to include such provisions in the initial construction than it would be to fully or partially defer such provisions until the demand for water supply arises. In preparing the economic justification analysis and in selecting an alternative plan for providing the deferred water supply, benefits and costs must be brought to a common time basis, recognizing that the alternative would probably not be built until the need for the services arises. Storage provided for future municipal and industrial water supply should be used to the maximum extent practical for other beneficial purposes in the interim until use is initiated for water supply. If such interim use is for irrigation and the project is located in the Western states, careful consideration will be given to the applicability of Reclamation Law, and to actions considered appropriate for such application. Interim use should be reflected in the benefits and allocations of cost.

b. The construction cost of including the water supply facilities for future use, including the allocated part of the joint construction costs of the project, should not be more than 30 percent of the total estimated construction costs of the project. This may be in addition to an allocation for immediate water supply use when both immediate and future use are involved. In exceptional cases for which there are compelling reasons, recommendations may be included in survey or review reports for provisions for future water supply involving more than 30 percent of the construction costs. However, advance approval should be obtained from the Chief of Engineers.

c. Reasonable evidence should be developed and analyzed by reporting officers to show that anticipated future demand for the use of such storage will be made within a period of time which will permit paying out the costs allocated to water supply within the life of the project. This will require careful analysis of projected water supply needs, and full coordination with the Public Health Service and State and local interests. One important element in the consideration of this matter is the effect of interest charges, commencing after the 10 year interest free period (see subparagraph g, below). For example, one dollar invested in uncontracted water supply storage and facilities for 40 years would, after the 10th year, accumulate interest charges of more than a dollar, thus more than doubling the investment cost to be repaid by the responsible local entity. Plans for future use will include an estimate of the dates when progressive increments will be placed in service for water supply.

d. The responsible State or local interests who will eventually contract for the water supply storage will be required to furnish reasonable assurances that demands for the use of such storage will be made within a

period of time which will permit paying out the costs allocated to water supply within the life of the project, but in no event to exceed 50 years after the project is first used for the storage of water for water supply purposes. The 50-year limitation for payout may be considered applicable to the entire future demand storage, or, if desired, to each of the progressive increments thereof as placed in service for water supply. Reasonable assurances that demands for use of storage for future use will be made obtainable, generally in a form similar to that shown in the attached Appendix III. Assurances will include a written statement to the effect that the project plan is fully understood so far as water supply provisions are concerned, that projections of future water demands are concurred in and are consistent with local projections, and that the local plans for future water supply will be directed toward utilizing the project water supply services under suitable repayment arrangements. The assurances should be obtained before construction is initiated and forwarded, along with evidence of legal authority, for consideration by the Chief of Engineers before commitments are made as to acceptance. There is, of course, no prohibition against early reimbursement of the cost of such water supply storage and facilities, and early contracts even prior to the initiation of construction to accomplish this objective should be encouraged.

e. It is not considered that the requirement to repay the future water supply costs "within the life of the project" is limited to the period assumed in evaluating economic justification of the project, but may be extended over the physical life during which the project can be reasonably expected to be operated without substantial impairment by sedimentation or by excessive physical deterioration of the engineering works.

f. No payment will be required for the cost allocated for future water supply until use is initiated. However, local interests should be encouraged to pay current interest charges on the allocated investment cost during the period of non-use after the interest-free period as discussed further below.

g. No interest will be charged on the investment costs (construction costs plus interest during construction) allocated to future water supply until use is initiated, but such interest-free period shall not exceed ten years. If use is not initiated until after ten years from the time the project is completed and available for water supply services, the interest from the tenth year until use is initiated may, at local option, be paid annually in order to avoid the long term cumulative effects of such interest (see subparagraph c, above). This may be accomplished by the inclusion of suitable provisions in the contract, if available, for present demand storage (see subparagraph 8d), or if not available, by contract pertaining to the future demand storage. Where it is impracticable to provide for payment of

interest until use is initiated, the interest from the tenth year until use is initiated will be compounded annually and added to the investment costs to be repaid.

h. Annual operation and maintenance costs, and major capital replacement costs, will not be charged to future water supply until a contract is made for such future water supply and payments are initiated. Until payments are initiated, operation, maintenance and replacement costs allocated to future water supply will be assigned to nonreimbursable functions served by the project. Operation and maintenance costs should be assessed annually commensurate with the progressive increments of storage placed in service for water supply. In a similar manner, major capital replacement costs should be paid either annually, with interest on the unpaid balance, or in lump sum at the time such costs are incurred.

i. In accordance with the foregoing there may be number of different repayment periods for water supply in one project, depending upon the number of contracting entities and upon when use is initiated under the various contracts.

10. Modification of Authorized Projects which are not Constructed.

a. Authorized projects may be modified to include water supply, and the value of such water supply included in the economic justification. However, such modifications which would seriously affect the purpose for which the project was authorized or which would involve major structural or operational changes can be made only upon approval of Congress.

b. Planning studies of authorized projects will include full consideration of water supply which should be included in the project. Early consideration of water supply will be required so that the project will not be delayed unduly in the event additional approval by Congress is required.

c. If the project as planned to include water supply provides essentially equivalent services for the authorized project purposes as originally contemplated by Congress, and the inclusion of water supply does not involve any conflict with Federal or State laws or compacts approved by Congress, it will normally be considered that the purposes for which the project was authorized are not seriously affected and that major operational changes are not involved.

d. An important criterion in determining whether major structural changes are involved will be whether or not the allocation to future water supply is in excess of 30 percent of the total estimated reservoir project cost.

e. Full information will be furnished the Chief of Engineers during the planning studies for review and determination on whether or not inclusion of water supply as planned is authorized without further approval by Congress.

f. In the event the Chief of Engineers determines that approval of Congress for including water supply is required, it will be necessary to obtain authority and prepare a review report in accordance with existing procedures.

11. Modification of Completed Projects.

a. Consideration of water supply in completed projects normally will be based upon receipt of requests for such services or upon basin-wide review.

b. Favorable consideration should be given to the use of projects for water supply where the studies indicate that water supply represents a higher type of use compared to adverse effect on the authorized project purposes and considering other possible alternates which might be developed to provide the same service. Consideration should also be given to the possibility of enlarging projects for water supply. In basin studies involving needs for water supply, modification of completed projects should be among the alternatives considered.

* c. Reallocation of reservoir storage that would have a significant effect on other authorized purposes or that would involve major structure or operational changes will require specific congressional approval. Projects in this category must be the subject of a special report that can be transmitted to Congress for its consideration. The studies should be financed to the maximum extent practical from funds currently available. If extensive studies are required beyond that which can be financed with available funds, full information on funds needed should be furnished to the Chief of Engineers.

d. Reallocation of reservoir storage that would have an insignificant effect on other authorized purposes will be handled as follows:

(1) Price. The cost to the non-Federal interests for the reallocated storage will be established as the higher of either benefits or revenues foregone, or the cost of the storage in the Federal project as described below.

(a) Benefits or revenues foregone. The loss of project benefits that would result from the reallocation of storage will be computed on the basis of current price levels, interest rates, and conditions, projected for the remaining economic life of the project. In the case of a reimbursable function, a check should be made as to revenues that will be lost, evaluated on the basis of current rate levels and projected over the new period of analysis. It is unlikely that revenues will exceed benefits; should this be the case, however, loss of revenues should be used in lieu of benefits to evaluate the minimum cost to be recovered by the water supply purpose.

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If the reallocated storage is being taken from the flood control pool, it may be appropriate to utilize the replacement cost of equivalent protection to adequately reflect monetary and nonmonetary benefits foregone.

(b) Cost of Storage. The costs to be reallocated to the water supply storage will be determined by first computing the costs at the time of construction by using the Use of Facilities cost allocation procedure as follows:

$$\frac{\text{(Total construction cost-specific cost)}}{\text{Total usable storage (ac-ft)}} \times \text{Storage reallocated (ac-ft)}$$

The costs allocated to the storage on this basis is then to be escalated to present day price levels by use of the Engineering News Record Construction Index. The updating factor should be based on the index at the midpoint of the physical construction period as compared to the index at the beginning of the fiscal year in which the contract for the reallocated storage is approved. The cost of storage determined by this method is to be limited by the cost of the least costly alternative as determined in subparagraph (c) below. Operation, maintenance and major replacement costs should be computed annually by the Use of Facilities Method and added to the cost of the storage to determine the total yearly payment.

(c) Economic feasibility. As a test of economic feasibility, the annual cost of storage derived by the cost updating method should be compared to the annual cost of the most likely, least costly alternative that would provide an equivalent quality and quantity of water which the local interest would undertake in absence of utilizing the Federal project. This analysis is to be included in reports which request the reallocation of storage for municipal and industrial water supply.

(2) Repayment provisions. The interest rate applicable to repayment contracts should be that computed in accordance with the Water Supply Act of 1958 for the fiscal year in which the contract is approved. Since requests for reallocation of storage should be within the context of satisfying immediate needs, the 10-year interest free period is not considered appropriate. The repayment period should be limited to the remaining physical life of the project, but not to exceed 50 years.

(3) Cost accounts. All income and expenses (investment, operation, maintenance, and replacement) associated with the water supply function shall be separately identified in the official cost account record. When there is a loss of revenue to existing purposes, or additional operation and/or maintenance expense to existing purposes are incurred because of the new water supply addition, such charges shall be shown as a direct charge against the water supply function. This will effect the appropriate cost reductions in the existing project purposes and all revenues from the new addition will be credited to the new purpose.

e. Modifications of reservoir projects to allocate all or a part of the storage serving any authorized purpose from such purpose to storage serving domestic, municipal, or industrial water supply purposes are considered insignificant if the total reallocation of storage that may be made for such water supply uses in the modified project is not greater than 15 percentum of total storage capacity allocated to all authorized Federal purposes or 50,000 acre feet, whichever is less.

f. For contracts under Section 6 of the Flood Control Act of 1944, the desired quantity of water should first be converted to an equivalent storage requirement. The annual cost of this storage to include operation, maintenance and replacement payments should then be established in accordance with d(1) above. Non-Federal interests would then be required to make annual payments of this amount for the right to withdraw the specified quantity of water. *

12. Benefits.

a. The benefits from municipal and industrial water supply storage result from improvements in conditions of water use, largely in regard to quantity and dependability, quality, and physical convenience. In basic concept the limiting values of such improvements are the maximum amounts prudent users would be willing to pay for the water supply storage components of municipal and industrial water supplies, assuming that decision would be made on the basis of a broad public viewpoint rather than a regional or local viewpoint. However, because of the complex objective and subjective considerations involved in the establishment of these maximum amounts, precise measurement of benefits on this basis frequently is difficult, if not impossible. Pending improvements in

evaluation techniques, alternative costs comprise a conservative and the most generally acceptable basis for measurement of the benefits from municipal and industrial water supply storage.

b. Annual benefits resulting from an increase in water quantity and dependability may be measured as the cost of obtaining the same quantity and quality of water by the cheapest alternative means that would most likely be developed by the potential water users in the absence of the Federal project. The costs of the cheapest alternative source should be based on non-Federal practices for such works and non-Federal financing and interest rates. If the alternative source of water is not in the general vicinity of the proposed Federal project it will be necessary to adjust the benefits to the Federal site by adding or subtracting the estimated difference in the cost of transporting the water to the water users. An adjustment in benefits may also be necessary to allow for the amount of water required to meet any existing lawful uses of water in the downstream areas or to satisfy existing water rights which may be affected by operation of the water supply storage.

c. Additional annual benefits may result from an improvement in water quality resulting from use of a surface supply stored in a reservoir as compared with the quality of water from an existing source, such as from wells. Such benefits may be evaluated on the basis of savings in cost of treatment for the net increase in water supply, recognizing that additional benefits may result from increased effectiveness in the production of industrial products. Conversely, any decrease in the quality of water stored in a potential reservoir project as compared with an existing source should be accounted for by discounting water supply benefits to allow for increased treatment costs, or to allow for other adverse effects such as limitations on use by the water users.

d. Additional annual benefits may result from reduction in pumping costs due to the head provided by a reservoir project, or other improvement in physical convenience.

e. When it is not possible to definitely establish the potential water users, or the alternative water supply project that could reasonably be expected to develop in the absence of the Federal project, water supply benefits may be based on the average unit cost of raw water (for comparable units of dependable yield) from municipal or industrial water supply projects planned or constructed in the general region. Such benefits should be adjusted insofar as practicable to reflect the current price level, and differences in dependability, quality, and physical convenience. Water supply benefits also might be based, in this case, upon an estimated alternate reservoir to provide the same water supply services as from the multiple-purpose project following current practices for estimating costs of Federal projects.

f. Estimates of annual benefits resulting from water supply facilities provided for future use which are used in project economic analysis should be discounted at the Federal interest rate to allow for the estimated period of non-use.

g. A study of the benefits of a proposed water supply facility should include appropriate information on the increase in dependable yield from the regulation provided by the water supply storage.

13. Allocation of Costs.

a. The water users are to pay for the cost of water supply provisions on the basis that all authorized purposes served by the project, including water supply, share equitably in the benefits of multiple-purpose construction. As discussed in subparagraph 9a, interim use of future water supply storage for other purposes should be reflected in the benefits for such purposes as well as allocation of costs.

b. The allocation of costs should meet the following criteria:

(1) The costs allocated to any function will not exceed its benefits, or the lowest justifiable alternative cost, whichever is less.

(2) The costs allocated to any function will be at least equal to the costs incurred by the inclusion of that function in the plan of development.

c. In the case of water supply, the Corps of Engineers favors the Use of Facilities method of cost allocation, except where clearly not applicable or where power, recreation, or fish and wildlife also are involved as primary project functions. In these instances, the Separable Costs-Remaining Benefits method ordinarily will be used (see EM 1120-2-101, paragraph 1-85, and EM 1160-2-101). Where an allocation to water supply was presented to Congress in the survey report, that method of allocation will be used if it satisfies the criteria given above in subparagraphs 13a and 13b.

d. In the application of the Use of Facilities method, the cost of specific facilities shall be assigned directly to the purposes served, and the cost of joint-use facilities shall be distributed to the purposes in proportion to the comparable measure of use, which will normally be reservoir capacity.

e. The results of the allocation of construction costs to water supply will be expressed as follows:

(1) Local interests will be required to bear the construction cost of specific water supply facilities, presently estimated at $ _____.

(2) Local interests will be required to bear _____ percent of the construction cost of the joint-use facilities, such share being currently estimated at $_____.

The allocation of annual operation and maintenance costs to water supply will be expressed in the same manner. A statement will be included requiring local interests to share the costs of major capital replacements, distributed in the same proportions as the construction costs.

f. The statement of local cooperation requirements in survey reports becomes exceedingly complex in the case of several multiple-purpose reservoirs wherein water supply storage is to be provided over a period of time in relation to water supply needs. In such cases, consideration may be given to simplified language requiring repayment of costs allocated to water supply in accordance with the provisions of the Water Supply Act of 1958, as amended; giving the present estimates in the simplest possible terms, such as in percentages of first costs, operation, maintenance and replacement costs; and providing sufficient information in reference tables or otherwise to make clear the basis of computation.

g. Cost allocations will be required at various times as outlined in paragraph 1-06 of EM 1160-2-101. In survey reports, the results will be carefully qualified, recognizing that a substantial period of time may elapse before construction is initiated and that substantial changes may be expected during the intervening period in some of the principal factors. The survey report allocation, therefore, should be subject to change by later studies to be made on the basis of conditions prevailing at the time of construction. It is recognized, however, that in some cases it will be necessary to make firm commitments with water users on the costs to be repaid prior to the final cost allocation as defined in EM 1160-2-101. In such cases, the cost allocation should be currently reviewed immediately prior to the time such commitments are necessary and prior approval obtained from the Chief of Engineers. The commitment should be based upon payment of specific costs plus a percentage of the joint-use costs. The exact amount of the payment would be determined by the actual costs incurred.

h. In the case of completed projects involving reimbursable functions such as hydroelectric power or irrigation, a complete analysis will be made of the effects of adding water supply storage on the preliminary or final cost allocations, and the adverse effects on existing or prospective reimbursement arrangements for such other purposes. If, for example, the water supply storage is reallocated from a portion of the power storage, the allocation to water supply should at least be sufficient to recover the loss in power revenues that results from the reallocation.

14. Repayment.

a. All construction, operation and maintenance, replacement, and interest costs incurred by the Federal Government and allocated to water supply should be repaid by the water users except for part of such costs allocated to future water as discussed in subparagraphs 9g and 9h.

b. The schedule of payments by States or local interests of such costs will provide either for paying the share of construction expenditure during construction of the project, plus payments for operation and maintenance costs, annually, and for payment of replacement costs when incurred or annually; or for annual payments for the construction costs, including interest during construction, and interest on the unpaid balance, plus payments for operation and maintenance, annually, and for payment of replacement costs when incurred or annually. The construction costs, including interest during construction, for the present demand storage and for the various increments of future demand storage, as needed (see subparagraph 9d), shall be repaid within the life of the project, but in no event to exceed 50 years after the date on which each increment of such storage is first used.

15. Interest Rate. The interest rate to be used to determine repayment requirements in computing interest during construction on the construction costs allocated to water supply and interest on the unpaid balance will be determined by the Secretary of the Treasury pursuant to the Water Supply Act of 1958 and will be furnished by the Chief of Engineers to Division and District Engineers. In applying the Water Supply Act of 1958, construction will be considered as having been initiated on the date when the first lands for the project are acquired or on the date when the first construction contract is let, whichever is the earlier. For planning purposes and the distribution of construction, operation and maintenance, and replacement costs among the purposes served, the interest rate established by the Bureau of the Budget under Budget Circular A-47 will be used in accordance with existing procedures (see EM 1120-2-104). The water supply interest rate furnished by the Secretary which is appropriate to the year construction was or will be initiated, will be selected from the tabulation in Appendix II.

16. Withdrawal of Water and Conveyance to Point of Use. Need for facilities for withdrawal of water from storage and its conveyance to point of use should be considered in survey studies to the extent necessary for sound planning and evaluation of Federal projects involving water supply storage, to insure adequate consideration of possibilities for multiple-purpose development to which the Federal interest may extend, and to insure effective development and use of water resources, subject to the following:

a. Where facilities for withdrawal and conveyance of water are essential components of plans for effective development and use of water resources for flood control, water supply, irrigation, navigation, hydroelectric power production or other purposes in which Federal interest resides, they may be incorporated as features of Federal projects proposed for such purposes. However, this provision does not extend to inclusion of local water distribution systems.

b. Where facilities for withdrawal and conveyance of water are incorporated as features of Federal projects for water supply and other purposes an equitable share of the first costs and operation, maintenance, and replacement costs will be allocated to water conveyance in accordance with the cost allocation procedures applicable to the projects as a whole.

c. Costs allocated to water conveyance will be assigned to non-Federal interests except for such portions as may equitably be assigned to the Federal Government as, for example, where a Federal installation would be served.

d. First costs for water conveyance assigned to non-Federal interests may be paid at the time of construction of water conveyance facilities, or on an annual basis beginning at the time of completion of these facilities. In the latter case repayment arrangements will be generally the same as for water supply storage, exclusive of waiver of interest. (The provisions of the Water Supply Act of 1958 relative to waiver of interest which apply to storage for future use are not considered to extend to conveyance facilities even in the case where immediate and future water supply are combined, and initially constructed conveyance facilities provide capacity for future use).

e. Responsibility for maintenance and operation of water conveyance facilities generally will be assigned to local interests. In special cases maintenance and operation might be undertaken by the Federal Government on a reimbursable basis as, for example, where service of a Federal installation would warrant such action.

17. The principles outlined in paragraph 16 will be applied in the survey stage. Problems arising in connection with their use will be referred to the Chief of Engineers for consideration. Appropriate background information and recommendations should be submitted at the same time.

*18. Water Users Not Providing Storage or Utilizing Surplus Water.

a. The Water Supply Act of 1958 (Appendix IV) and Section 6 of the Flood Control Act of 1944 (58 Stat. 890, 33 U.S.C. 708) specify policies and procedures for reimbursement for water supply services when storage space is provided or surplus water is used. These authorities shall be followed whenever appropriate. When neither storage is provided nor surplus water is used, reimbursement for services provided or privileges granted in connection with domestic, municipal, and industrial water supply from a Corps of Engineers project shall be obtained pursuant to Section 501 of the Independent Offices Appropriation Act of 1952 (65 Stat. 290, 31 U.S.C. 483a), referred to hereafter as 31 U.S.C. 483a.

b. 31 U.S.C. 483a provides for the prescribing of charges determined by the head of the Federal agency "to be fair and equitable taking into consideration direct and indirect cost to the Government, value to the recipient, public policy or interest served, and other pertinent facts." *

*19. Implementation of Provisions of 31 U.S.C. 483a.

a. Establishment of Charges Pursuant to 31 U.S.C. 483a. In establishing charges pursuant to provisions of 31 U.S.C. 483a, the following procedures are considered to be preferable when they are reasonably applicable, and when special circumstances do not clearly indicate the desirability of some other method. Exceptions to the following procedures will be submitted to the Chief of Engineers for approval before adoption.

(1) Charges determined on the basis of the value of services rendered. Such charges shall not, however, be less than project revenues foregone as a result of withdrawal of the water.

(2) A standard minimum charge. This method is particularly suitable for very small users.

(3) A standard unit charge. This method may be based on the value of similar services elsewhere in the area. In some instances water services provided by the Corps are closely interrelated to other Federal activities such as the Reclamation program, and consistency in public policies may be of primary significance in setting a standard rate. *

[illegible] standard minimum charge or unit rate intended for use in a number of [illegible] will also be submitted for approval of the Chief of Engineers before adoption.

b. Where the water user is to pay the standard minimum charge, provisions will be included in the appropriate real estate instrument to obtain reimbursement for service provided or privileges granted under 31 U.S.C. 483a. In all other cases, contracts executed under the authority of 31 U.S.C. 483a shall be in the form prescribed in HQI A-312, and may be executed by the District Engineer when the annual charge or equivalent hereof does not exceed $1,000. Approval of the Chief of Engineers shall be obtained where larger amounts are involved. Contracts involving unusual problems or appearing to have significant new policy aspects shall also be referred to the Chief of Engineers for approval before execution. Payments may be made annually or in a lump sum for the entire contract; with respect to small contracts, lump sum payments are preferred. Normally, contracts made pursuant to 31 U.S.C. 483a shall not give the User a permanent privilege, but shall be limited to a period of time commensurate with the intended use and include provisions for periodic redetermination of the charges at the option of the Contracting Officer.

c. Users who have previously obtained a license to cross government land and have been withdrawing small amounts of water without reimbursement except for the interest in land may continue to do so until the license becomes subject to renewal. *

20. Coordination.

a. Corps of Engineers' personnel responsible for planning and developing proposed projects shall, within the authority of existing laws and administrative practices, consult with local organizations in the area primarily affected, State and local governments, and other Federal agencies, with respect to the requirements and necessity for provision of additional water supply facilities. This consultation should take place at the earliest feasible stage and should be continued

throughout the investigations, survey, and planning stages, in order that the views of these groups and agencies may receive adequate consideration. Plans for the development of municipal and industrial water supplies shall be thoroughly coordinated with the State or States affected and the Public Health Service with a view to including their views and recommendations in survey and review reports to be submitted to Congress or in reports on authorized projects submitted to the Chief of Engineers.

b. Coordination with the local interests and the State water authorities will also include full consideration of the possible adverse effects of the operation of the water supply storage on lawful uses of water and water rights, with the understanding that the local interests contracting for the storage space will be required to utilize the water supply storage in a manner which is not inimical to such uses and rights.

c. A copy of a Memorandum of Agreement between the Department of the Army and the Department of Health, Education, and Welfare is attached as Appendix I. That Agreement provides a basis for obtaining the advice and assistance from the Public Health Service on water supply matters in connection with the Civil Works Program of the Corps of Engineers.

FOR THE CHIEF OF ENGINEERS:

RICHARD F. McADOO
Colonel, Corps of Engineers
Executive

4 Appendices
APP I Memorandum of Agreement
APP II Interest Table
APP III Assurances on Water Supply
APP IV Amended Water Supply Act of 1958

EM 1165-2-105
Change 10
18 Feb 72

From page 13 of the EM.

* 18. Water Users Not Requiring Storage or Utilizing Surplus Water.

a. The Water Supply Act of 1958 (Appendix IV) and Section 6 of the Flood Control Act of 1944 (58 Stat. 890, 33 U.S.C. 708) specify policies and procedures for reimbursement for Water supply services when storage space is provided or surplus water is used.

*19. Implementation of Provisions of 31 U.S.C. 483a.

a. Establishment of Charges Pursuant to 31 U.S.C. 483a. In establishing charges pusuant to provisions of 31 U.S.C. 483a, the following procedures are considered to be preferable when they are reasonably applicable, and when special circumstances do not clearly indicate the desirability of some other method. Exceptions to the following procedures will be submitted to the Chief of Engineers for approval before adoption.

From the top of page 14 of the EM

* A standard minimum charge or unit rate intended for use in a number of ----- will also be submitted for approval of the Chief of Engineers before adoption.

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throughout the investigations, survey, and planning stages, in order that the views of these groups and agencies may receive adequate consideration. Plans for the development of municipal and industrial water supplies shall be thoroughly coordinated with the State or States affected and the Public Health Service with a view to including their views and recommendations in survey and review reports to be submitted to Congress or in reports on authorized projects submitted to the Chief of Engineers.

*18. Water Users Not Requiring Storage or Utilizing Surplus Water.

a. The Water Supply Act of 1958 (Appendix IV) and Section 6 of the Flood Control Act of 1944 (58 Stat. 890, 33 U.S.C. 708) specify policies and procedures for reimbursement for water supply services when storage space is provided or surplus water is used. These authorities shall be followed whenever appropriate. When neither storage is provided nor surplus water is used, reimbursement for services provided or privileges granted in connection with domestic, municipal, and industrial water supply from a Corps of Engineers project shall be obtained pursuant to Section 501 of the Independent Offices Appropriation Act of 1952 (65 Stat. 290, 31 U.S.C. 483a), referred to hereafter as 31 U.S.C. 483a.

b. 31 U.S.C. 483a provides for the prescribing of charges determined by the head of the Federal agency "to be fair and equitable taking into consideration direct and indirect cost to the Government, value to the recipient, public policy or interest served, and other pertinent facts." *

*19. Implementation of Provisions of 31 U.S.C. 483a.

a. Establishment of Charges Pursuant to 31 U.S.C. 483a. In establishing charges pursuant to provisions of 31 U.S.C. 483a, the following procedures are considered to be preferable when they are reasonably applicable, and when special circumstances do not clearly indicate the desirability of some other method. Exceptions to the following procedures will be submitted to the Chief of Engineers for approval before adoption.

(1) Charges determined on the basis of the value of services rendered. Such charges shall not, however, be less than project revenues foregone as a result of withdrawal of the water.

(2) A standard minimum charge. This method is particularly suitable for very small users.

(3) A standard unit charge. This method may be based on the value of similar services elsewhere in the area. In some instances water services provided by the Corps are closely interrelated to other Federal activities such as the Reclamation program, and consistency in public policies may be of primary significance in setting a standard rate. *

* A standard minimum charge or unit rate intended for use in a number of actions will also be submitted for approval of the Chief of Engineers before adoption.

b. Where the water user is to pay the standard minimum charge, provisions will be included in the appropriate real estate instrument to obtain reimbursement for service provided or privileges granted under 31 U.S.C. 483a. In all other cases, contracts executed under the authority of 31 U.S.C. 483a shall be in the form prescribed in ECI A-312, and may be executed by the District Engineer when the annual charge or equivalent hereof does not exceed $1,000. Approval of the Chief of Engineers shall be obtained where larger amounts are involved. Contracts involving unusual problems or appearing to have significant new policy aspects shall also be referred to the Chief of Engineers for approval before execution. Payments may be made annually or in a lump sum for the entire contract; with respect to small contracts, lump sum payments are preferred. Normally, contracts made pursuant to 31 U.S.C. 483a shall not give the User a permanent privilege, but shall be limited to a period of time commensurate with the intended use and include provisions for periodic redetermination of the charges at the option of the Contracting Officer.

c. Users who have previously obtained a license to cross government land and have been withdrawing small amounts of water without reimbursement except for the interest in land may continue to do so until the license becomes subject to renewal. *

20. Coordination.

a. Corps of Engineers' personnel responsible for planning and developing proposed projects shall, within the authority of existing laws and administrative practices, consult with local organizations in the area primarily affected, State and local governments, and other Federal agencies, with respect to the requirements and necessity for provision of additional water supply facilities. This consultation should take place at the earliest feasible stage and should be continued

throughout the investigations, survey, and planning stages, in order that the views of these groups and agencies may receive adequate consideration. Plans for the development of municipal and industrial water supplies shall be thoroughly coordinated with the State or States affected and the Public Health Service with a view to including their views and recommendations in survey and review reports to be submitted to Congress or in reports on authorized projects submitted to the Chief of Engineers.

b. Coordination with the local interests and the State water authorities will also include full consideration of the possible adverse effects of the operation of the water supply storage on lawful uses of water and water rights, with the understanding that the local interests contracting for the storage space will be required to utilize the water supply storage in a manner which is not inimical to such uses and rights.

c. A copy of a Memorandum of Agreement between the Department of the Army and the Department of Health, Education, and Welfare is attached as Appendix I. That Agreement provides a basis for obtaining the advice and assistance from the Public Health Service on water supply matters in connection with the Civil Works Program of the Corps of Engineers.

FOR THE CHIEF OF ENGINEERS:

RICHARD F. McADOO
Colonel, Corps of Engineers
Executive

4 Appendices
APP I Memorandum of Agreement
APP II Interest Table
APP III Assurances on Water Supply
APP IV Amended Water Supply Act of 1958

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