

[Code of Federal Regulations]  
[Title 33, Volume 3]  
[Revised as of July 1, 2009]  
From the U.S. Government Printing Office via GPO Access  
[CITE: 33CFR222.5]

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TITLE 33--NAVIGATION AND NAVIGABLE WATERS

CHAPTER II--CORPS OF ENGINEERS, DEPARTMENT OF THE ARMY, DEPARTMENT OF DEFENSE

PART 222\_ENGINEERING AND DESIGN--Table of Contents

Sec. 222.5 Water control management (ER 1110-2-240).

(a) Purpose. This regulation prescribes policies and procedures to be followed by the U.S. Army Corps of Engineers in carrying out water control management activities, including establishment of water control plans for Corps and non-Corps projects, as required by Federal laws and directives.

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(b) Applicability. This regulation is applicable to all field operating activities having civil works responsibilities.

(c) References. Appendix A lists U.S. Army Corps of Engineers publications and sections of Federal statutes and regulations that are referenced herein.

(d) Authorities--(1) U.S. Army Corps of Engineers projects. Authorities for allocation of storage and regulation of projects owned and operated by the Corps of Engineers are contained in legislative authorization acts and referenced project documents. These public laws and project documents usually contain provisions for development of water control plans, and appropriate revisions thereto, under the discretionary authority of the Chief of Engineers. Some modifications in project operation are permitted under congressional enactments subsequent to original project authorization. Questions that require interpretations of authorizations affecting regulation of specific reservoirs will be referred to CDR USACE (DAEN-CWE-HW), WASH DC 20314, with appropriate background information and analysis, for resolution.

(2) Non-Corps projects. The Corps of Engineers is responsible for prescribing flood control and navigation regulations for certain reservoir projects constructed or operated by other Federal, non-Federal or private agencies. There are several classes of such projects: Those authorized by special acts of Congress; those for which licenses issued by the Federal Energy Regulatory Commission (formerly Federal Power Commission) provide that operation shall be in accordance with instructions of the Secretary of the Army; those covered by agreements between the operating agency and the Corps of Engineers; and those that fall under the terms of general legislative and administrative provisions. These authorities, of illustrative examples, are described briefly in Appendix B.

(e) Terminology: Water control plans and reservoir regulation schedules. (1) Water control plans include coordinated regulation schedules for project/system regulation and such additional provisions as may be required to collect, analyze and disseminate basic data, prepare detailed operating instructions, assure project safety and carry out regulation of projects in an appropriate manner.

(2) The term "reservoir regulation schedule" refers to a compilation of operating criteria, guidelines, rule curves and specifications that govern basically the storage and release functions of a reservoir. In general, schedules indicate limiting rates of reservoir releases required during various seasons of the year to meet all functional objectives of the particular project, acting separately or in combination with other projects in a system. Schedules are usually expressed in the form of graphs and tabulations, supplemented by concise specifications.

(f) General policies. (1) Water control plans will be developed for reservoirs, locks and dams, reregulation and major control structures and interrelated systems to conform with objectives and specific provisions of authorizing legislation and applicable Corps of Engineers reports. They will include any applicable authorities established after project construction. The water control plans will be prepared giving appropriate consideration to all applicable Congressional Acts relating to operation of Federal facilities, i.e., Fish and Wildlife Coordination Act (Pub. L. 85-624), Federal Water Project Recreation Act-Uniform Policies (Pub. L. 89-72), National Environmental Policy Act of 1969 (Pub. L. 91-190), and Clean Water Act of 1977 (Pub. L. 95-217). Thorough

analysis and testing studies will be made as necessary to establish the optimum water control plans possible within prevailing constraints.

(2) Necessary actions will be taken to keep approved water control plans up-to-date. For this purpose, plans will be subject to continuing and progressive study by personnel in field offices of the Corps of Engineers. These personnel will be professionally qualified in technical areas involved and familiar with comprehensive project objectives and other factors affecting water control. Organizational requirements for water control management are further discussed in ER 1110-2-1400.

(3) Water control plans developed for specific projects and reservoir systems will be clearly documented in appropriate water control manuals. These

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manuals will be prepared to meet initial requirements when storage in the reservoir begins. They will be revised as necessary to conform with changing requirements resulting from developments in the project area and downstream, improvements in technology, new legislation and other relevant factors, provided such revisions comply with existing Federal regulations and established Corps of Engineers policy.

(4) Development and execution of water control plans will include appropriate consideration for efficient water management in conformance with the emphasis on water conservation as a national priority. The objectives of efficient water control management are to produce beneficial water savings and improvements in the availability and quality of water resulting from project regulation/operation. Balanced resource use through improved regulation should be developed to conserve as much water as possible and maximize all project functions consistent with project/system management. Continuous examination should be made of regulation schedules, possible need for storage reallocation (within existing authority and constraints) and to identify needed changes in normal regulation. Emphasis should be placed on evaluating conditions that could require deviation from normal release schedules as part of drought contingency plans (ER 1110-2-1941).

(5) Adequate provisions for collection, analysis and dissemination of basic data, the formulation of specific project regulation directives, and the performance of project regulation will be established at field level.

(6) Appropriate provisions will be made for monitoring project operations, formulating advisories to higher authorities, and disseminating information to others concerned. These actions are required to facilitate proper regulation of systems and to keep the public fully informed regarding all pertinent water control matters.

(7) In development and execution of water control plans, appropriate attention will be given to project safety in accordance with ER 1130-2-417 and ER 1130-2-419 so as to insure that all water impounding structures are operated for the safety of users of the facilities and the general public. Care will be exercised in the development of reservoir regulation schedules to assure that controlled releases minimize project impacts and do not jeopardize the safety of persons engaged in activities downstream of the facility. Water control plans will include provisions for issuing adequate warnings or otherwise alerting all affected interests to possible hazards from project regulation activities.

(8) In carrying out water control activities, Corps of Engineers personnel must recognize and observe the legal responsibility of the National Weather Service (NWS), National Oceanic and Atmospheric Administration (NOAA), for issuing weather forecasts and flood warnings, including river discharges and stages. River forecasts prepared by the Corps of Engineers in the execution of its responsibilities should not be released to the general public, unless the NWS is willing to make the release or agrees to such dissemination. However, release to interested parties of factual information on current storms or river conditions and properly quoted NWS forecasts is permissible. District offices are encouraged to provide assistance to communities and individuals regarding the impact of forecasted floods. Typical advice would be to provide approximate water surface elevations at locations upstream and downstream of the NWS forecasting stream gages. Announcement of anticipated changes in reservoir release rates as far in advance as possible to the general public is the responsibility of Corps of Engineers water control managers for projects under their jurisdiction.

(9) Water control plans will be developed in concert with all basin interests which are or could be impacted by or have an influence on project regulation. Close coordination will be maintained with all appropriate international, Federal, State, regional and local agencies in the development and execution of water control plans. Effective public information programs will be developed and maintained so as to inform and educate the public regarding Corps of Engineers water control management activities.

(10) Fiscal year budget requests for water control management

activities

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will be prepared and submitted to the Office of the Chief of Engineers in accordance with requirements established in Engineer Circular on Annual Budget Requests for Civil Works Activities. The total annual costs of all activities and facilities that support the water control functions, (excluding physical operation of projects, but including flood control and navigation regulation of projects subject to 33 CFR 208.11) are to be reported. Information on the Water Control Data Systems and associated Communications Category of the Plant Replacement and Improvement Program will be submitted with the annual budget. Reporting will be in accordance with the annual Engineer Circular on Civil Works Operations and Maintenance, General Program.

(g) Responsibilities: US Army Corps of Engineers projects--(1) Preparation of water control plans and manuals. Normally, district commanders are primarily responsible for background studies and for developing plans and manuals required for reservoirs, locks and dams, reregulation and major control structures and interrelated systems in their respective district areas. Policies and general guidelines are prescribed by OCE engineer regulations while specific requirements to implement OCE guidance are established by the division commanders concerned. Master Water Control Manuals for river basins that include more than one district are usually prepared by or under direct supervision of division representatives. Division commanders are responsible for providing such management and technical assistance as may be required to assure that plans and manuals are prepared on a timely and adequate basis to meet water control requirements in the division area, and for pertinent coordination among districts, divisions, and other appropriate entities.

(2) Public involvement and information--(i) Public meeting and public involvement. The Corps of Engineers will sponsor public involvement activities, as appropriate, to appraise the general public of the water control plan. In developing or modifying water control manuals, the following criteria is applicable.

(A) Conditions that require public involvement and public meetings include: Development of a new water control manual that includes a water control plan; or revision or update of a water control manual that changes the water control plan.

(B) Revisions to water control manuals that are administratively or informational in nature and that do not change the water control plan do not require public meetings.

(C) For those conditions described in paragraph (g)(2)(i)(A) of this section, the Corps will provide information to the public concerning proposed water control management decisions at least 30 days in advance of a public meeting. In so doing, a separate document(s) should be prepared that explains the recommended water control plan or change, and provides technical information explaining the basis for the recommendation. It should include a description of its impacts (both monetary and nonmonetary) for various purposes, and the comparisons with alternative plans or changes and their effects. The plan or manual will be prepared only after the public involvement process associated with its development or change is complete.

(D) For those conditions described in paragraph (g)(2)(i)(A) of this section, the responsible division office will send each proposed water control manual to the Army Corps of Engineers Headquarters, Attn: CECW-EH-W for review and comments prior to approval by the responsible division office.

(ii) Information availability. The water control manual will be made available for examination by the general public upon request at the appropriate office of the Corps of Engineers. Public notice shall be given in the event of occurring or anticipated significant changes in reservoir storage or flow releases. The method of conveying this information shall be commensurate with the urgency of the situation and the lead time available.

(3) Authority for approval of plans and manuals. Division commanders are delegated authority for approval of water control plans and manuals, and associated activities.

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(4) OCE role in water control activities. OCE will establish policies and guidelines applicable to all field offices and for such actions as are necessary to assure a reasonable degree of consistency in basic policies and practices in all Division areas. Assistance will be provided to field offices during emergencies and upon special request.

(5) Methods improvement and staff training. Division and district commanders are responsible for conducting appropriate programs for improving technical methods applicable to water control activities in their respective areas. Suitable training programs should be maintained

to assure a satisfactory performance capability in water control activities. Appropriate coordination of such programs with similar activities in other areas will be accomplished to avoid duplication of effort, and to foster desirable exchange of ideas and developments. Initiative in re-evaluating methods and guidelines previously established in official documents referred to in paragraph (e) of this section is encouraged where needs are evident. However, proposals for major deviations from basic concepts, policies and general practices reflected in official publications will be submitted to CDR USACE (DAEN-CWE) WASH DC 20314 for concurrence or comment before being adopted for substantial application in actual project regulation at field level.

(h) Directives and technical instruction manuals. (1) Directives issued through OCE Engineer Regulations will be used to foster consistency in policies and basic practices. They will be supplemented as needed by other forms of communication.

(2) Engineering Manuals (EM) and Engineer Technical Letters (ETL) are issued by OCE to serve as general guidelines and technical aids in developing water control plans and manuals for individual projects or systems.

(3) EM 1110-2-3600 discusses principles and concepts involved in developing water control plans. Instructions relating to preparation of "Water Control Manuals for specific projects" are included. EM 1110-2-3600 should be used as a general guide to water control activities. The instructions are sufficiently flexible to permit adaptation to specific regions. Supplemental information regarding technical methods is provided in numerous documents distributed to field offices as "hydrologic references."

(4) Special assistance in technical studies is available from the Hydrologic Engineering Center, Corps of Engineers, 609 Second Street, Davis, California 95616 and DAEN-CWE-HW.

(i) Water control manuals for US Army Corps of Engineers projects. (1) As used herein, the term "water control manual" refers to manuals that relate primarily to the functional regulation of an individual project or system of projects. Although such manuals normally include background information concerning physical features of projects, they do not prescribe rules or methods for physical maintenance or care of facilities, which are covered in other documents. (References 15 and 23, appendix A.)

(2) Water control manuals prepared in substantially the detail and format specified in instructions referred to in paragraph 8 are required for all reservoirs under the supervision of the Corps of Engineers, regardless of the purpose or size of the project. Water Control manuals are also required for lock and dam, reregulation and major control structure projects that are physically regulated by the Corps of Engineers. Where there are several projects in a drainage basin with interrelated purposes, a "Master Manual" shall be prepared. The effects of non-Corps projects will be considered in appropriate detail, including an indication of provisions for interagency coordination.

(3) "Preliminary water control manuals," for projects regulated by the Corps of Engineers should contain regulation schedules in sufficient detail to establish the basic plan of initial project regulation.

(4) As a general rule, preliminary manuals should be superseded by more detailed interim or "final" manuals within approximately one year after the project is placed in operation.

(5) Each water control manual will contain a section on special regulations to be conducted during emergency situations, including droughts.

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Preplanned operations and coordination are essential to effective relief or assistance.

(6) One copy of all water control manuals and subsequent revisions shall be forwarded to DAEN-CWE-HW for file purposes as soon as practicable after completion, preferably within 30 days from date of approval at the division level.

(j) Policies and requirements for preparing regulations for non-Corps projects. (1) Division and district commanders will develop water control plans as required by section 7 of the 1944 Flood Control Act, the Federal Power Act and section 9 of Pub. L. 436-83 for all projects located within their areas, in conformance with ER 1110-2-241, 33 CFR part 208. That regulation prescribes the policy and general procedures for regulating reservoir projects capable of regulation for flood control or navigation, except projects owned and operated by the Corps of Engineers; the International Boundary and Water Commission, United States and Mexico; those under the jurisdiction of the International Joint Commission, United States and Canada, and the Columbia River Treaty. ER 1110-2-241, 33 CFR part 208 permits the promulgation of specific regulations for a project in compliance with the authorizing acts, when agreement on acceptable regulations cannot be reached between the Corps Engineers and the owners. Appendix B provides a summary of the

Corps of Engineers responsibilities for prescribing regulations for non-Corps reservoir projects.

(2) Water control plans will be developed and processed as soon as possible for applicable projects already completed and being operated by other entities, including projects built by the Corps of Engineers and turned over to others for operation.

(3) In so far as practicable, water control plans for non-Corps projects should be developed in cooperation with owning/operating agencies involved during project planning stages. Thus, tentative agreements on contents, including pertinent regulation schedules and diagrams, can be accomplished prior to completion of the project.

(4) The magnitude and nature of storage allocations for flood control or navigation purposes in non-Corps projects are governed basically by conditions of project authorizations or other legislative provisions and may include any or all of the following types of storage assignments:

(i) Year-round allocations: Storage remains the same all year.

(ii) Seasonal allocations: Storage varies on a fixed seasonal basis.

(iii) Variable allocations of flood control from year to year, depending on hydrologic parameters, such as snow cover.

(5) Water control plans should be developed to attain maximum flood control or navigation benefits, consistent with other project requirements, from the storage space provided for these purposes. When reservoir storage capacity of the category referred to in paragraph (j)(4)(iii) is utilized for flood control or navigation, jointly with other objectives, the hydrologic parameters and related rules developed under provisions of ER 1110-2-241, 33 CFR part 208 should conform as equitably as possible with the multiple-purpose objectives established in project authorizations and other pertinent legislation.

(6) Storage allocations made for flood control or navigation purposes in non-Corps projects are not subject to modifications by the Corps of Engineers as a prerequisite for prescribing 33 CFR 208.11 regulations. However, regulations developed for use of such storage should be predicated on a mutual understanding between representatives of the Corps and the operating agency concerning the conditions of the allocations in order to assure reasonable achievement of basic objectives intended. In the event field representatives of the Corps of Engineers, and the operating agency are unable to reach necessary agreements after all reasonable possibilities have been explored, appropriate background explanations and recommendations should be submitted to DAEN-CWE-HW for consideration.

(7) The Chief of Engineers is responsible for prescribing regulations for use of flood control or navigation storage and/or project operation under the provisions of the referenced legislative acts. Accordingly, any regulations established should designate the division/

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district commander who is responsible to the Chief of Engineers as the representative to issue any special instructions required under the regulation. However, to the extent practicable, project regulations should be written to permit operation of the project by the owner without interpretations of the regulations by the designated representative of the Commander during operating periods.

(8) Responsibility for compliance with 33 CFR 208.11 regulations rests with the operating agency. The division or district commander of the area in which the project is located will be kept informed regarding project operations to verify reasonable conformance with the regulations. The Chief of Engineers or his designated representative may authorize or direct deviation from the established water control plan when conditions warrant such deviation. In the event unapproved deviations from the prescribed regulations seem evident, the division or district commander concerned will bring the matter to the attention of the operating agency by appropriate means.

If corrective actions are not taken promptly, the operating agency should be notified of the apparent deviation in writing as a matter of record. Should an impasse arise, in that the project owner or the designated operating entity persists in noncompliance with regulations prescribed by the Corps of Engineers, the Office of Chief Counsel should be advised through normal channels and requested to take necessary measures to assure compliance.

(9) Regulations should contain information regarding the required exchange of basic data between the representative of the operating agency and the U.S. Army Corps of Engineers, that are pertinent to regulation and coordination of interrelated projects in the region.

(10) All 33 CFR 208.11 regulations shall contain provisions authorizing the operating agency to temporarily deviate from the regulations in the event that it is necessary for emergency reasons to protect the safety of the dam, to avoid health hazards, and to alleviate

other critical situations.

(k) Developing and processing regulations for non-Corps projects. Guidelines concerning technical studies and development of regulations are contained in ER 1110-2-241, 33 CFR part 208 and EM 1110-2-3600. Appendix C of this regulation summarizes steps normally followed in developing and processing regulations for non-Corps projects.

(1) Water control during project construction stage. Water control plans discussed in preceding paragraphs are intended primarily for application after the dam, spillway and outlet structures; major relocations; land acquisitions, administrative arrangements and other project requirements have reached stages that permit relatively normal project regulation. With respect to non-Corps projects, regulations normally become applicable when water control agreements have been signed by the designated signatories, subject to special provisions in specific cases. In some instances, implementation of regulations has been delayed by legal provisions, contract limitations, or other considerations. These delays can result in loss of potential project benefits and possible hazards. Accordingly, it is essential that appropriate water control and contingency plans be established for use from the date any storage may accumulate behind a partially completed dam until the project is formally accepted for normal operations. Division commanders shall make certain that construction-stage regulation plans are established and maintained in a timely and adequate manner for projects under the supervision of the Corps of Engineers. In addition, the problems referred to should be discussed with authorities who are responsible for non-Corps projects, with the objective of assuring that such projects operate as safely and effectively as possible during the critical construction stage and any period that may elapse before regular operating arrangements have been established. These special regulation plans should include consideration for protection of construction operations; safety of downstream interests that might be jeopardized by failure of partially completed embankments; requirements for minimizing adverse effects on partially completed relocations or incomplete land acquisition; and the need for obtaining benefits from project storage

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that can be safely achieved during the construction and early operation period.

(m) Advisories to OCE regarding water control activities--(1) General. Division commanders will keep the Chief of Engineers currently informed of any unusual problems or activities associated with water control that impact on his responsibilities.

(2) Annual division water control management report (RCS DAEN-CWE-16(R1)). Division commanders will submit an annual report on water control management activities within their division. The annual report will be submitted to (DAEN-CWE-HW) by 1 February each year and cover significant activities of the previous water year and a description of activities to be accomplished for the current year. Funding information for water control activities will be provided in the letter of transmittal for in-house use only. The primary objective of this summary is to keep the Chief of Engineers informed regarding overall water management activities Corps-wide, thus providing a basis to carry out OCE responsibilities set forth in paragraph (g)(4) of this section.

(3) Status of water control manuals. A brief discussion shall be prepared annually by each division commander, as a separate section of the annual report on water control management activities discussed in paragraph (m)(2) of this section listing all projects currently in operation in his area, or expected to begin operation within one-year, with a designation of the status of water control manuals. The report should also list projects for which the Corps of Engineers is responsible for prescribing regulations, as defined in ER 1110-2-241, 33 CFR part 208.

(4) Monthly water control charts (RCS DAEN-CWE-6 (R1)). A monthly record of reservoirs/lakes operated by the Corps of Engineers and other agencies, in accordance with 33 CFR 208.11, will be promptly prepared and maintained by district/division commanders in a form readily available for transmittal to the Chief of Engineers, or others, upon request. Record data may be prepared in either graphical form as shown in EM 1110-2-3600, or tabular form as shown in the sample tabulation in Appendix D.

(5) Annual division water quality reports (RCS DAEN-CWE-15). By Executive Order 12088, the President ordered the head of each Executive Agency to be responsible for ensuring that all necessary actions are taken for prevention, control, and abatement of environmental pollution with respect to Federal facilities and activities under control of the agency. General guidance is provided in references 24 and 25, Appendix A, for carrying out this agency's responsibility. Annual division water quality reports are required by reference 24, Appendix A. The report is submitted in two parts. The first part addresses the division Water

quality management plan while the second part presents specific project information. A major objective of this report is to summarize information pertinent to water quality aspects of overall water management responsibilities. The annual division water quality report may be submitted along with the annual report on water control management activities discussed in paragraph 13b above.

(6) Master plans for water control data systems (RCS DAEN-CWE-21).

(i) A water control data system is all of the equipment within a division which is used to acquire, process, display and distribute information for real-time project regulation and associated interagency coordination. A subsystem is all equipment as defined previously within a district. A network is all equipment as defined previously which is used to regulate a single project or a group of projects which must be regulated interdependently.

(ii) Master plans for water control data systems and significant revisions thereto will be prepared by division water control managers and submitted to DAEN-CWE-HW by 1 February each year for review and approval of engineering aspects. Engineering approval does not constitute funding approval. After engineering approval is obtained, equipment in the master plan is eligible for consideration in the funding processes described in ER 1125-2-301

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and engineering circulars on the annual budget request for civil works activities. Master plans will be maintained current and will:

(A) Outline the system performance requirements, including those resulting from any expected expansions of Corps missions.

(B) Describe the extent to which existing facilities fulfill performance requirements.

(C) Describe alternative approaches which will upgrade the system to meet the requirements not fulfilled by existing facilities, or are more cost effective than the existing system.

(D) Justify and recommend a system considering timeliness, reliability, economics and other factors deemed important.

(E) Delineate system scope, implementation schedules, proposed annual capital expenditures by district, total costs, and sources of funding.

(iii) Modified master plans should be submitted to DAEN-CWE-HW by 1 February, whenever revisions are required, to include equipment not previously approved or changes in scope or approach. Submittal by the February date will allow adequate time for OCE review and approval prior to annual budget submittals.

(iv) Division commanders are delegated authority to approve detailed plans for subsystems and networks of approved master plans. Plans approved by the division commander should meet the following conditions:

(A) The plan conforms to an approved master plan.

(B) The equipment is capable of functioning independently.

(C) An evaluation of alternatives has been completed considering reliability, cost and other important factors.

(D) The plan is economically justified, except in special cases where legal requirements dictate performance standards which cannot be economically justified.

(v) Copies of plans approved by the division commander shall be forwarded to appropriate elements in OCE in support of funding requests and to obtain approval of Automatic Data Processing Equipment (ADPE), when applicable.

(vi) Water control data systems may be funded from Plant Revolving Fund; O&M General; Flood Control, MR&T, and Construction, General. Funding for water control equipment that serves two or more projects will be from Plant Revolving Fund in accordance with ER 1125-2-301. District and division water control managers will coordinate plant revolving fund requests with their respective Plant Replacement and Improvement Program (PRIP) representatives following guidance provided in ER 1125-2-301. Budget funding requests under the proper appropriation title should be submitted only if the equipment is identified in an approved master plan.

(vii) Justification for the Automatic Data Processing Equipment (ADPE) aspects of water control data systems must conform to AR 18-1, Appendix I or J as required. The "Funding for ADPE" paragraph in Appendixes I and J must cite the source of funds and reference relevant information in the approved master plan and detailed plan.

(viii) Division water control managers will submit annual letter summaries of the status of their respective water control systems and five-year plan for improvements. These summaries will be submitted to DAEN-CWE by 1 June for coordination with DAEN-CWO, CWB and DSZ-A, prior to the annual budget request. Summaries should not be used to obtain approval of significant changes in master plans. Sources of funding for all items for each district and for the division should be delineated so that total system expenditures and funding requests are identified. Changes in the master plan submitted 1 February should be documented in

this letter summary if the changes were approved.

(7) Summary of runoff potentials in current season (RCS DAEN-CWO-2).  
(i) The Chief of Engineers and staff require information to respond to inquiries from members of Congress and others regarding runoff potentials. Therefore, the division commander will submit a snowmelt runoff and flood potential letter report covering the snow accumulation and runoff period, beginning generally in February and continuing monthly, until the potential no longer exist. Dispatch of supplemental reports will be determined by the urgencies of situations as they occur. The reports

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will be forwarded as soon as hydrologic data are available, but not later than the 10th of the month. For further information on reporting refer to ER 500-1-1, 33 CFR part 203.

(ii) During major drought situations or low-flow conditions, narrative summaries of the situation should be furnished to alert the Chief of Engineers regarding the possibility of serious runoff deficiencies that are likely to call for actions associated with Corps of Engineers reservoirs.

(iii) The reports referred to in paragraphs (m)(7) (i) and (ii) of this section will include general summaries regarding the status of reservoir storage, existing and forecasted at the time of the reports.

(8) Reports on project operations during flood emergencies. Information on project regulations to be included in reports submitted to the Chief of Engineers during flood emergencies in accordance with ER 500-1-1 include rate of inflow and outflow in CFS, reservoir levels, predicted maximum level and anticipated date, and percent of flood control storage utilized to date. Maximum use should be made of computerized communication facilities in reporting project status to DAEN-CWO-E/CWE-HW in accordance with the requirements of ER 500-1-1, 33 CFR part 203.

(9) Post-flood summaries of project regulation. Project regulation effects including evaluation of the stage reductions at key stations and estimates of damages prevented by projects will be included in the post flood reports required by ER 500-1-1, 33 CFR part 203.

(n) Water Control Management Boards. (1) The Columbia River Treaty Permanent Engineering Board was formed in accordance with the Columbia River Treaty with Canada. This board, composed of U.S. and Canadian members, oversees the implementation of the Treaty as carried out by the U.S. and Canadian Entities.

(2) The Mississippi River Water Control Management Board was established by ER 15-2-13. It consists of the Division Commanders from LMVD, MRD, NCD, ORD, and SWD with the Director of Civil Works serving as chairman. The purposes of the Board are:

(i) To provide oversight and guidance during the development of basin-wide management plans for Mississippi River Basin projects for which the US Army Corps of Engineers has operation/regulation responsibilities.

(ii) To serve as a forum for resolution of water control problems among US Army Corps of Engineers Divisions within the Mississippi River Basin when agreement is otherwise unobtainable.

(o) List of projects. Projects owned and operated by the Corps of Engineers subject to this regulation are listed with pertinent data in Appendix E. This list will be updated periodically to include Corps projects completed in the future. Federal legislation, Federal regulations and local agreements have given the Corps of Engineers wide responsibilities for operating projects which it does not own. Non-Corps projects subject to this regulation are included in Appendix A of ER 1110-2-241.

#### Appendix A to Sec. 222.5--References

1. The Federal Power Act, Pub. L. 436-83, approved 10 June 1920, as amended (41 Stat. 1063; 16 U.S.C. 791(a))
2. Section 3 of the Flood Control Act approved 22 June 1936, as amended (49 Stat. 1571; 33 U.S.C. 701(c))
3. Section 9(b) of Reclamation Project Act of 1939, approved 4 August 1939 (53 Stat. 1187; 43 U.S.C. 485)
4. Section 7 of the Flood Control Act approved 22 December 1944 (58 Stat. 890; 33 U.S.C. 709)
5. Section 5 of Small Reclamation Projects Act of 6 August 1956, as amended (70 Stat. 1046; 43 U.S.C. 422(e))
6. Section 9 of Pub. L. 436-83d Congress (68 Stat. 303)
7. The Fish and Wildlife Coordination Act of 1958, Pub. L. 85-624
8. The Federal Water Project Recreation Act Uniform Policies, Pub. L. 89-72
9. The National Environmental Policy Act of 1969, Pub. L. 91-190
10. The Clean Water Act of 1977, Pub. L. 95-217
11. Executive Order 12088, Federal Compliance with Pollution Control

Standards, 13 October 1978

12. 33 CFR 208.10, Local flood protection works; maintenance and operation of structures and facilities (9 FR 9999; 9 FR 10203)
13. 33 CFR 208.11, Regulations for use of Storage Allocated for Flood Control or Navigation and/or Project Operation at Reservoirs

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subject to Prescription of Rules and Regulations by the Secretary of the Army in the Interest of Flood Control and Navigation (43 FR 47184)

14. AR 18-1
15. ER 11-2-101
16. ER 15-2-13
17. ER 500-1-1, 33 CFR part 203
18. ER 1110-2-241, 33 CFR part 208
19. ER 1110-2-1400
20. ER 1110-2-1402
21. ER 1110-2-1941
22. ER 1125-2-301
23. ER 1130-2-303
24. ER 1130-2-334
25. ER 1130-2-415
26. ER 1130-2-417
27. ER 1130-2-419
28. EM 1110-2-3600

Appendix B to Sec. 222.5--Summary of Corps of Engineers  
Responsibilities for Prescribing Regulations for Non-Corps Reservoir  
Projects

Summary

1. (a) ``Regulations for Use of Storage Allocated for Flood Control or Navigation and/or Project Operation at Reservoirs subject to Prescription of Rules and Regulations by the Secretary of the Army in the Interest of Flood Control and Navigation'' (33 CFR 208.11) prescribe the responsibilities and general procedures for regulating reservoir projects capable of regulation for flood control or navigation and the use of storage allocated for such purposes and provided on the basis of flood control and navigation, except projects owned and operated by the Corps of Engineers; the International Boundary and Water Commission, United States and Mexico; and those under the jurisdiction of the International Joint Commission, United States and Canada, and the Columbia River Treaty.

(b) Pertinent information on projects for which regulations are prescribed under Section 7 of the 1944 Flood Control Act, (Pub. L. 78-58 Stat. 890 (33 U.S.C. 709)) the Federal Power Act (41 Stat. 1063 (16 U.S.C. 791(A))) and Section 9 of Pub. L. 436-83d Congress (68 Stat. 303) is published in the Federal Register in accordance with 33 CFR 208.11.

Publication in the Federal Register establishes the fact and the date of a project's regulation plan promulgation.

2. Section 7 of Act of Congress approved 22 December 1944 (58 Stat. 890; 33 U.S.C. 709), reads as follows:

``Hereafter, it shall be the duty of the Secretary of War to prescribe regulations for the use of storage allocated for flood control or navigation at all reservoirs constructed wholly or in part with Federal funds provided on the basis of such purposes, and the operation of any such project shall be in accordance with such regulations: Provided, That this section shall not apply to the Tennessee Valley Authority, except that in case of danger from floods on the Lower Ohio and Mississippi Rivers the Tennessee Valley Authority is directed to regulate the release of water from the Tennessee River into the Ohio River in accordance with such instructions as may be issued by the War Department.''

3. Section 9(b) of the Reclamation Project Act of 1939, approved 4 August 1939 (53 Stat. 1189, 43 U.S.C. 485), provides that the Secretary of the Interior may allocate to flood control or navigation as part of the cost of new projects or supplemental works; and that in connection therewith he shall consult with the Chief of Engineers and may perform any necessary investigations under a cooperative agreement with the Secretary of the Army. These projects are subject to 33 CFR 208.11 regulations.

4. Several dams have been constructed by State agencies under provisions of legislative acts wherein the Secretary of the Army is directed to prescribe rules and regulations for project operation in the interest of flood control and navigation. These projects are subject to 33 CFR 208.11 regulations.

5. There are few dams constructed under Emergency Conservation work authority or similar programs, where the Corps of Engineers has performed major repairs or rehabilitation, that are operated and maintained by local agencies which are subject to 33 CFR 208.11

regulations.

6. The Federal Power Act, approved 10 June 1920, as amended (41 Stat. 1063, 16 U.S.C. 791 (A)), established the Federal Power Commission, now Federal Energy Regulatory Commission (FERC), with authority to issue licenses for constructing, operating, and maintaining dams or other project works for the development of navigation, for utilization of water power and for other beneficial public uses in any streams over which Congress has jurisdiction. The Chief of Engineers is called upon for advice and assistance as needed in formulating reservoir regulation requirements somewhat as follows:

a. In response to requests from the FERC, opinions and technical appraisals are furnished by the Corps of Engineers for consideration prior to issuance of licenses by the FERC. Such assistance may be limited to general presentations, or may include relatively detailed proposals for water control plans, depending upon the nature and scope of projects under consideration. The information furnished is subject to such consideration and use as the Chairman, FERC, deems appropriate. This may result in inclusion of simple provisions in licenses without elaboration, or relatively detailed requirements for reservoir regulation schedules and plans.

b. Some special acts of Congress provide for construction of dams and reservoirs by non-Federal agencies or private firms under

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licenses issued by the FERC, subject to stipulation that the operation and maintenance of the dams shall be subject to reasonable rules and regulations of the Secretary of the Army in the interest of flood control and navigation. Ordinarily no Federal funds are involved, thus Section 7 of the 1944 Flood Control Act does not apply. However, if issuance of regulations by the Secretary of the Army is required by the authority under which flood control or navigation provisions are included as functions of the specific project or otherwise specified in the FERC license, regulation plans will be prescribed in accordance with 33 CFR 208.11 regulations.

7. Projects constructed by the Corps of Engineers for local flood protection purposes are subject to conditions of local cooperation as provided in Section 3 of the Flood Control Act approved 22 June 1936, as amended. One of those conditions is that a responsible local agency will maintain and operate all works after completion in accordance with regulations prescribed by the Secretary of the Army. Most such projects consist mainly of levees and flood walls with appurtenant drainage structures. Regulations for operation and maintenance of these projects has been prescribed by the Secretary of the Army in 33 CFR 208.10. When a reservoir is included in such a project, it may be appropriate to apply 33 CFR 208.10 in establishing regulations for operation, without requiring their publication in the Federal Register. For example, if the reservoir controls a small drainage area, has an uncontrolled flood control outlet with automatic operation or contains less than 12,500 acre-feet of flood control or navigation storage, 33 CFR 208.10 may be suitable. However, 33 CFR 208.11 regulations normally would be applicable in prescribing flood control regulations for the individual reservoir, if the project has a gated flood control outlet by which the local agency can regulate floods.

8. Regulation plans for projects owned by the Corps of Engineers are not prescribed in accordance with 33 CFR 208.11. However, regulation plans for projects constructed by the Corps of Engineers and turned over to other agencies or local interests for operation may be prescribed in accordance with 33 CFR 208.11.

9. The Small Reclamation Projects Act of 6 August 1956 provides that the Secretary of the Interior may make loans or grants to local agencies for the construction of reclamation projects. Section 5 of the Act provides in part that the contract covering any such grant shall set forth that operation be in accordance with regulations prescribed by the head of the Federal department or agency primarily concerned. Normally, 33 CFR 208.11 is not applicable to these projects.

#### Appendix C to Sec. 222.5--Procedures for Developing and Processing Regulations for Non-Corps Projects in Conformance with 33 CFR 208.11

1. Sequence of actions. a. Discussions leading to a clarification of conditions governing allocations of storage capacity to flood control or navigation purposes and project regulation are initiated by District/Division Engineers through contacts with owners and/or operating agencies concerned at regional level.

b. Background information on the project and conditions requiring flood control or navigation services, and other relevant factors, are assembled by the District Engineer and incorporated in a "Preliminary Information Report". The Preliminary Information Report will be submitted to the Division Engineer for review and approval. Normally, the agency having jurisdiction over the particular project is expected

to furnish information on project features, the basis for storage allocations and any other available data pertinent to the studies. The Corps of Engineers supplements this information as required.

c. Studies required to develop reservoir regulation schedules and plans usually will be conducted by Corps of Engineers personnel at District level, except where the project regulation affects flows in more than one district, in which case the studies will be conducted by or under supervision of Division personnel. Assistance as may be available from the project operating agency or others concerned will be solicited.

d. When necessary agreements are reached at district level, and regulations developed in accordance with 33 CFR 208.11 and EM 1110-2-3600, they will be submitted to the Division Commander for review and approval, with information copies for DAEN-CWE-HW. Usually the regulations include diagrams of operating parameters.

e. For projects owned by the Bureau of Reclamation, the respective Regional Directors are designated as duly authorized representatives of the Commissioner of Reclamation. By letter of 20 October 1976, the Commissioner delegated responsibilities to the Regional Directors as follows: ``Regarding the designated authorization of representatives of the Commissioner of Reclamation in matters relating to the development and processing of Section 7 flood control regulations, we are designating each Regional Director as our duly authorized representative to sign all letters of understanding, water control agreements, water control diagrams, water control release schedules and other documents which may become part of the prescribed regulations.

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The Regional Director also will be responsible for obtaining the signature of the designated operating agency on these documents where such is required. Regarding internal coordination within the Bureau of Reclamation, the Regional Directors will obtain the review and approval of this office and at appropriate offices with our Engineering and Research Center, Denver, Colorado, prior to signing water control documents.'

f. In accordance with the delegation cited in paragraph e, 33 CFR 208.11 regulations pertaining to Bureau of Reclamation projects will be processed as follows:

(1) After regulation documents submitted by District Commanders are reviewed and approved by the Division Commander they are transmitted to the respective Regional Director of the Bureau of Reclamation for concurrence of comment, with a request that tracings of regulation diagrams be signed and returned to the Division Commander.

(2) If any questions arise at this stage appropriate actions are taken to resolve differences. Otherwise, the duplicate tracings of the regulation diagram are signed by the Division Commander and transmitted to the office of the project owner for filing.

(3) After full agreement has been reached in steps (1) and (2), the text of proposed regulations is prepared in final form. Copies of any diagrams involved are included for information only.

(4) A letter announcing completion of action on processing the regulations, with pertinent project data as specified in paragraph 208.11(d)(11) of 33 CFR 208.11, and one copy of the signed tracings of diagrams are forwarded to HQDA (DAEN-CWE-HW) WASH DC 20314 for promulgation and filing. The office of the Chief of Engineers will forward the pertinent project data to the Liaison Officer with the Federal Register, requesting publication in the Federal Register.

g. Regulations developed in accordance with 33 CFR 208.11 and applicable to projects that are not under supervision of the Bureau of Reclamation are processed in substantially the manner described above. All coordination required between the Corps of Engineers and the operating agency will be accomplished at field level.

h. Upon completion of actions listed above, Division Commanders are responsible for informing the operating agencies at field level that regulations have been promulgated.

2. Signature blocks: Some 33 CFR 208.11 regulations contain diagrams of parameter curves that cannot be published in the Federal Register, but are made a part thereof by appropriate reference. Each diagram bears a title block with spaces for the signature of authenticating officials of the Corps of Engineers and the owner/operating agency of the project involved.

3. Designation of Corps of Engineers Representatives. Division Commanders are designated representatives of the Chief of Engineers in matters relating to development and processing of 33 CFR 208.11 regulations for eventual promulgation through publication of selected data specified in paragraph (d)(11) Sec. 208.11. Division Commanders are designated as the Corps of Engineers signee on all letters of understanding, water control agreements and other documents which may become part of prescribed regulations for projects located in their respective geographic areas, and which are subject to the provisions of

Appendix D to Sec. 222.5--Sample Tabulation  
Bardwell Lake, Monthly Lake Report, May 1975

Inflow adj. DSF	Rain, inch	Day	Elevations 0800: 2,400 feet-MSL		Storage 2400 A-F	Evap DSF	Pump DSF	Release DSF
1			421.30	421.31	55979	28	2.0	0
84	0.00							
2			421.32	421.37	56196	5	2.0	0
117	.00							
3			421.43	421.44	56449	23	1.9	0
152	.14							
4			421.45	421.47	56558	1	1.8	0
58	.00							
5			421.49	421.34	56088	1	2.0	324
50	.00							
6			421.20	421.01	54902	14	1.9	632
50	.00							
7			420.88	420.89	54473	4	2.0	269
59	.09							
8			420.89	420.91	54544	5	2.3	0
44	.00							
9			420.90	420.89	54473	11	1.5	0
38	.00							
10			420.90	420.90	54509	28	3.0	0
27	.00							
11			420.91	421.35	56124	26	1.8	0
824	.00							
12			421.54	421.65	57213	31	2.1	0
582	1.61							
13			421.70	421.75	57578	29	2.2	0
216	.00							
14			421.78	421.76	57614	34	1.9	249
303	.03							
15			421.69	421.52	56739	22	1.9	643
225	.57							
16			421.39	421.28	55871	39	2.1	535
138	.00							
17			421.19	421.09	55188	10	2.2	393
119	.00							
18			421.03	421.05	55045	46	2.0	143
60	.00							
19			421.04	421.07	55116	17	2.3	0
55	.00							
20			421.06	421.30	55943	21	2.1	0
440	.21							
21			421.39	421.47	56558	20	2.1	0
332	.97							
22			421.50	421.39	56268	42	2.1	247
145	.00							
23			421.37	424.91	69726	31	2.0	328
7146	.22							
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24			425.61	426.15	74825	22	2.0	0
2595	2.38							
25			426.15	426.55	76523	18	2.3	0
876	.11							
26			426.72	426.80	77598	42	2.1	0
586	.00							
27			426.95	427.00	78465	23	2.0	0
462	.00							
28			427.14	427.15	79116	31	2.1	0
361	.19							
29			427.31	427.70	81528	61	1.9	0
1279	.20							
30			427.94	428.05	83082	11	2.0	0
796	1.02							
31			428.20	428.22	83837	7	2.1	0
389	.00							
Monthly total:								
(DSF)						700	64	3763
18626	7.74							

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Appendix E to Sec. 222.5--List of

Projects

limits feet		Area in acres		Project		Storage	Elev
M.S.L.	Project name \1\	State/county	Stream \1\	purpose \2\	1,000 AF	-----	Upper
Lower	Upper	Lower	Auth legis \3\				
Lower Mississippi Valley Division							
0.0	0	0	FCA Jun 36.	MS Issaquena.... Little	F	0.0	0.0
209.3	33,400	5,100	FCA Jun 36.	MS Desoto..... Sunflower.	F	525.0	238.3
118.0	0	0	FCA Jun 36.	MS Tallahatchie. Ascalmore.....	F	0.0	136.0
2.0	0	0	PL 298-89	LA St Bernard... Bayou Bienvenue	F	0.0	2.0
230.0	0	0	FCA Oct 65.	AR Mississippi.. Ditch 81	C	0.0	0.0
230.0	0	0	FCA Oct 65.	AR Mississippi.. Extension..	C	0.0	0.0
230.0	0	0	FCA Oct 65.	AR Mississippi.. Little R.....	C	0.0	0.0
230.0	0	0	FCA Oct 65.	AR Mississippi.. Ditch 28.....	C	0.0	0.0
328.5	131,000	71,000	FCA May 28.	MO New Madrid... Mississippi....	F	0.0	330.5
157.0	21,000	110	PL 74-839.	LA Bossier..... Bayou Bodcau...	F	35.3	199.5
20.0	0	0	FCA May 28.	LA St Charles... Mississippi R..	F	0.0	24.0
1.2	0	0	PL 79-14.	LA Vermilion.... GIWW.....	I	0.0	1.2
168.5	59,000	26,800	FCA Oct 65.	LA Caddo..... Cypress Bayou..	N	128.6	182.7
299.0	0	0	PL 90-483.	IL Pulaski..... Ohio.....	F	0.0	310.5
1.2	0	0	RHA Oct 62.	LA Calcasieu.... Calcasieu R....	I	0.0	1.2
77.0	12,200	12,200	RHA 1950.	AR Union..... Ouachita.....	N	0.0	77.0
3.0	0	0	FCA Jun 36.	LA St Mary..... Wax Lake Outlet	FN	0.0	3.0
521.0	1,020	460	HD 507.	MO Ralls..... Salt R.....	PCA	5.8	528.0
445.0	50,440	24,580	SD 44.	IL Clinton..... Kaskaskia R....	F	699.0	462.5
445.0	429.5	0	7,100		NMCR	233.0	
27.0	25,000	94	RHA 1960.	LA LaSalle..... Catahoula Div..	CR	118.0	34.0
1.2	0	0	FCA Aug 41, RHA Jul 64.	LA Cameron..... Mermentau R....	FN	0.0	1.2
0.0	0	0	RHA Jul 46, FCA May 28.	LA St Mary..... Grand Lk.....	FN	0.0	0.0
13.0	0	0	FCA Aug 41.	LA Concorida.... Bayou Cocodrie.	F	0.0	46.0
				MS Warren..... Collins Cr.....	F	0.0	84.0

67.0	0	0	FCA 1941.					
Columbia L&D.....			LA Caldwell.....	Ouachita.....	N	0.0	52.0	
52.0	7,070	7,070	RHA 1950.					
Connerly CS.....			AR Chicot.....	Connerly Bayou.	FCR	0.0	116.0	
106.0	0	0	FCA Aug 68.					
Courtableau Drainage CS.....			LA St Landry....	Bayou	F	0.0	18.0	
16.0	0	0	FCA May 28, PL 391-70.					
				Courtableau.				
Darbonne CS.....			LA St. Landry...	Bayou Darbonne.	FI	0.0	18.0	
16.0	0	0	FCA May 28, PL 391-70.					
DeGray LK.....			AR Desoto.....	Caddo.....	FNPMRA	881.9	423.0	
345.0	23,800	6,400	RHA 1950, WSA 1958.					
DeGray Rereg. St.....			AR Clark.....	Caddo.....	NMRA	3.6	221.0	
209.0	430	90	RHA 1950. WSA 1958.					
Ditch Bayou Dam.....			AR Chicot.....	Ditch Bayou....	FCR	0.0	106.0	
93.0	0	0	FCA Aug 68.					
Drainage Dist <greek-i>17 PS.			AR Mississippi..	Ditch 71.....	F	3.0	236.0	
228.0	4,100	0	FCA Aug 68, PL 90-483.					
Drinkwater PS.....			MO Mississippi..	Drinkwater	F	20.6	315.0	
307.0	4,000	700	FCA May 50, PL 516.					
				Sewer.				
Dupre FG.....			LA St Bernard...	Bayou Dupre....	F	0.0	2.0	
2.0	0	0	PL 298-89.					
East St Louis PS.....			IL St. Clair....	IDD.....	F	0.0	0.0	
0.0	0	0	FC Act 36.					
Empire FG Hurr Prot & Lock...			LA Plaque mines.	Mississippi R..	F	0.0	5.0	
5.0	0	0	PL 874-87.					
Enid Lk.....			MS Yalobusha....	Yacona.....	F	660.0	268.0	
230.0	28,000	6,100	FCA Jun 36.					
Felsenthal L&D.....			AR Union.....	Ouachita.....	N	32.5	70.0	
65.0	46,500	17,500	RHA 1950.					

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Finley Street PS.....			TN Dyer.....	Forked Deer....	F	0.5	269.0	
257.0	94	22	FCA 1948, PL 85-500.					
Freshwater Lock.....			LA Vermilion....	Freshwater	I	0.0	0.0	
0.0	0	0	PL 86-645.					
				Bayou.				
					NI			
Graham Burke PS.....			AR Phillips.....	White.....	F	2,805.0	174.8	
140.0	149,000	2,500	FCA May 28, PL 85-500.					
Grenada Lk.....			MS Grenada.....	Yalobusha Skuna	F	1,357.4	231.0	
193.0	64,600	9,800	FCA Jun 36.					
Huxtable PS.....			AR Lee.....	St Francis.....	F	2,863.0	207.2	
165.0	18,500	1,400	FCA May 50.					
Jonesville L&D.....			LA Catahoula....	Black.....	N	0.0	34.0	
34.0	7,120	7,120	RHA 1950.					
Kaskaskia L&D.....			IL Randolph.....	Kaskaskia R....	N	1.1	368.0	
363.0	1,300	1,200	SD 44.					
L&D 1.....			LA Catahula....	Red R.....	N	0.0	40.0	
40.0	0	0	PL 90-483.					
L&D 2.....			LA Rapides.....	Red R.....	N	0.0	71.2	
64.0	0	0	PL 90-483.					
L&D 3.....			LA Rapides.....	Red R.....	N	0.0	95.0	
91.5	0	0	PL 90-483.					
L&D 4.....			LA Natchitoches.	Red R.....	N	0.0	120.0	
119.6	0	0	PL 90-483.					
L&D 5.....			LA Red R.....	Red R.....	N	0.0	145.0	
140.2	0	0	PL 90-483.					
L&D 24.....			MO Pike.....	Mississippi R..	N	29.7	449.0	
445.0	13,000	12,000	R&H Act, Jul 3/30.					
R&H Act, Aug 30/35.								
L&D 25.....			MO Lincoln.....	Mississippi R..	N	49.7	434.0	
429.7	18,000	16,600	R&H Act, Jul 3/30.					
R&H Act, 8/30/35.								
L&D 26.....			IL Madison.....	Mississippi R..	N	107.1	419.0	
414.0	30,000	27,700	R&H Act, Jul 3/30.					
R&H Act, 8/30/1935.								
Larose to Golden Meadow Hurr			LA LaFourche....	Bayou LaFourche	F	0.0	3.0	
3.0	0	0	FCA Oct 65, PL 89-298.					
Prot FG.								
Little Sun flower CS.....			MS Issaquena....	Lit. Sunflower.	F	0.0	85.0	
60.0	0	0	FCA 1941.					
Lk <greek-i>9 Culvert & PS...			KY Fulton.....	Mississippi....	F	6.5	286.0	
282.0	0	0	FCA Oct 65.					
Lk Chicot PS.....			AR Chicot.....	Macon Lk.....	FCR	0.0	118.2	

90.0	0	0	FCA Aug 68.						
Lk Greeson.....			AR Pike.....	Little Missouri	P		0.0	563.0	
436.9	0	0	FCA 1941.						
					FP		407.9		
563.0	504.0	9,800	2,500 .....						
Lk Ouachita.....			AR Garland.....	Ouachita.....	P		0.0	592.0	
480.0	0	0	FCA Dec 44.						
Long Branch DS.....			LA Catahoula....	Catahoula Div..	F		0.0	32.5	
32.5	0	0	FCA May 50.						
Mark Twain Lk.....			MO Ralls.....	Salt R.....	F		894.0	638.0	
606.0	38,400	18,600	HD 507.						
					PMCAR		457.0		
606.0	567.2	18,600	5,900 .....						
Marked Tree Siphon.....			AR Poinsett.....	St. Francis....	F		0.0	229.0	
198.3	0	0	FCA Jun 30.						
Morganza Div CS.....			LA Point Coupee.	Morganza	F		0.0	59.5	
49.0	0	0	FCA May 28.						
				Floodway.					
Muddy Bayou CS.....			MS Warren.....	Muddy Bayou....	FC		30.0	76.9	
70.0	4,350	2,860	FCA Oct 65.						
Old River Div CS Low Sill			LA W. Feliciana.	Old R.....	F		0.0	70.0	
5.0	0	0	PL 83-780.						
Overbank & Aux.									
Old River Lock.....			LA W Feliciana..	Old R.....	N		0.0	65.4	
10.0	0	0	FCA Sep 54, PL 780-83.						
Port Allen Lock.....			LA Port Allen...	GIWW.....	N		0.0	46.1	
2.6	0	0	RHA Jul 46.						
Prairie Dupont East & West PS			IL St Clair.....	IDD.....	F		0.0	0.0	
0.0	0	0	FC Act 62.						
Rapides-Boeuf Div Canal CS...			LA Rapides.....	Bayou Rapides..	F		0.0	66.0	
62.2	0	0	FCA Aug 41, GD 359-77.						
Rend Lk.....			IL Franklin.....	Big Muddy R....	F		109.0	405.0	
410.0	24,800	18,900	HD 541.						
					MA		160.0		
405.0	391.3	18,900	5,400 .....						
Sardis Lk.....			MS Panola.....	Little	F		1,569.9	281.4	
236.0	58,500	10,700	FCA Jun 36.						
				Sunflower.					
Schooner Bayou CS & Lock.....			LA Vermilion....	Schooner Bayou.	I		0.0	1.2	
1.2	0	0	FCA Aug 41.						
Shelbyville Lk.....			IL Shelby.....	Kaskaskia R....	F		474.0	626.5	
599.7	25,300	11,100	HD 232.						
					NMCR		180.0		
599.7	573.0	11,100	3,000 .....						
Sorrell Lock.....			LA Iberville....	GIWW.....	N		0.0	29.7	
3.5	0	0	FCA May 28.						
St Francis Lk CS.....			AR Poinsett.....	Oak Donnick	C		0.0	0.0	
210.0	0	2,240	FCA Oct 65.						
				Floodway.					
Steele Bayou CS.....			MS Issaquena....	Steele Bayou...	F		0.0	68.5	
60.0	0	0	FCA 1941.						
Tchula Lk Lower FG.....			MS Humphreys....	Tchula Lk.....	F		0.0	110.0	
84.0	0	0	FCA Jun 36.						
Tchula Lk Upper FG.....			MS Humphreys....	Tchula Lk.....	F		0.0	108.0	
92.0	0	0	FCA Jun 36.						
Teche-Vermilion PS & CS.....			LA St Mary.....	Atchafalaya R..	MI		0.1	18.0	
16.0	0	0	PL 89-789, FCA May 28.						
Tensas-Cocodrie PS.....			LA Cocordia....	Bayou Corcodrie	F		0.0	37.0	
23.0	0	0	FCA Oct 65.						
Treasure Island PS.....			MO Dunklin.....	Little R.....	F		23.4	252.0	
235.0	7,800	180	FCA Jul 46.						
Wallace Lk.....			LA Caddo.....	Cypress Bayou..	F		96.1	158.0	
142.0	9,300	2,300	RHA Mar 45, PL 75-761.						
Wappello Lk.....			MO Wayne.....	St Francis R...	F		613.2	394.7	
354.7	23,200	5,200	HD 159.						
Wasp Lk.....			MS Humphreys....	Wasp Lk-Bear Cr	F		0.0	111.6	
88.5	0	0	FCA Jun 36.						
West Hickman PS.....			KY Fulton.....	Mississippi....	F		0.0	302.0	
296.0	9	4	FCA 1948.						
Wood R PS.....			IL Madison.....	IDD.....	F		0.0	0.0	
0.0	0	0	FC Act 38.						
Yazoo City PS.....			MS Yazoo.....	Yazoo.....	F		0.0	96.0	
69.0	0	0	FCA Jun 36.						

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Missouri River Division  
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Bear Creek Dam & Res.....	CO Jefferson....	Bear Cr.....	F	28.8	5,635.5
5,558.0	718	109 PL 90-483.			
			F	1.9	
5,558.0	5,528.0	109			
		17 SD 87-90.			
Big Bend Dam & Lk Sharpe.....	SD Lyman Buffalo	Missouri R.....	F	61.0	1,423.0
1,422.0	61,000	60,000 PL 78-534.			
		Hughes.			
			F	117.0	
1,422.0	1,420.0	60,000			
		57,000 SD 247-78.			
Blue Springs Dam & Lk.....	MO Jackson.....	Little Blue R..	F	15.8	820.0
802.0	982	722 PL 90-483.			
			F	10.8	
802.0	760.0	722			
		0 HD 169-90.			
Blue Stem Lake & Dam 4.....	NE Lancaster....	Olive Br. Salt	F	7.2	1,322.5
1,307.4	660	315 PL 85-500.			
			F	3.0	
1,307.4	1,277.0	315			
		1 HD 396-84.			
Bowman-Haley Dam & Res.....	ND Bowman.....	No Fk Grand	F	72.7	2,777.0
2,754.8	5,131	1,732 PL 87-874.			
			F	15.5	
2,754.8	2,740.0	1,732			
		565 HD 574-87.			
Branched Oak Lk & Dam 18.....	NE Lancaster....	Oak Creek trib.	F	71.6	1,311.0
1,284.0	3,640	1,780 PL 85-500.			
			F	26.0	
1,284.0	1,250.0	1,780			
		0 HD 396-84.			
Bull Hook Dam.....	MT Hill.....	Bull Hook Cr	F	6.5	2,593.0
2,540.0	283	0 PL 78-534.			
			F	0.1	3,545.0
Cedar Canyon Dam.....	SD Pennington...	Deadman's Gulch	F	0.1	3,545.0
3,526.0	11	2 PL 80-858.			
Chatfield Dam & Res.....	CO Douglas.....	S Platte.....	F	204.7	5,500.0
5,432.0	4,742	1,412 PL 81-516.			
			F	26.7	
5,432.0	5,385.0	1,412			
		12 HD 669-80.			
Cherry Cr Dam & Res.....	CO Arapahoe....	Cherry Cr.....	F	80.0	5,598.0
5,550.0	2,637	852 PL 77-228.			
			F	14.0	
5,550.0	5,504.0	852			
		0 HD 426-76, PL 78-534.			
Clinton Dam & Lk.....	KS Douglas.....	Wakarusa R.....	F	267.8	903.4
875.5	12,891	7,006 PL 87-874.			
			F	129.2	
875.5	820.0	7,006			
		0 SD 122-87.			
Cold Brook Dam & Res.....	SD Fall River...	Cold Brook.....	F	6.7	3,651.4
3,585.0	198	36 PL 77-228.			
			F	0.5	
3,585.0	3,548.0	36			
		0 HD 655-76.			
Conestoga Lake & Dam 12.....	NE Lancaster....	Holmes Cr Trib	F	8.0	1,252.0
1,232.9	620	230 PL 85-500.			
			F	2.6	
1,232.9	1,197.0	230			
		1 HD 396-84.			
Cottonwood Springs Dam & Res.	SD Fall River...	Cottonwood	F	7.7	3,936.0
3,875.0	214	44 PL 77-228.			
			F	0.2	
3,875.0	3,868.0	44			
		30 HD 655-76.			
Fort Peck Dam & Res.....	MT Valley, Mc	Missouri R.....	F	977.0	2,250.0
2,246.0	249,000	240,000 PL 73-409.			
		Cone Garfield.			
			F	13,649.0	2,246.0
2,160.0	240,000	92,000 PL 75-529, HD 238-73.			
			F	985.0	1,375.0
PL 78-534, SD 247-78.					
Fort Randall Dam, Lk Francis	SD Gregory	Missouri R.....	F	985.0	1,375.0
1,365.0	102,000	95,000 PL 78-534.			
Case.		Charles.			
			F	3,021.0	1,365.0
1,320.0	95,000	41,000 SD 247-78.			
Garrison Dam, Lk Sakakawea...	ND Mercer McLean	Missouri R.....	F	1,494.0	1,854.0
1,850.0	382,000	365,000 PL 78-534.			
			F	17,440.0	1,850.0
1,775.0	365,000	129,000 SD 247-78.			
Gavins Point Dam, Lewis &	SD Yankton.....	Missouri R.....	F	61.0	1,210.0

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1,208.0	32,000	29,000	PL 78-534.					
Clark Lk.								
			NE Knox.....		FNPIMCAR		95.0	1,208.0
1,204.5	29,000	25,000	SD 247-78.					
Glenn Cunningham Lk, Dam 11..								
			NE Douglas.....	Little	F		14.0	1,142.0
1,121.0	922	392	PL 90-483.					
Papillion Cr.								
					FRCA		3.9	
1,121.0	1,085.0	392	0 HD 349-90.					
Harlan County Lk.....								
			NE Harlan.....	Republican R...	F		498.0	1,973.5
1,946.0	23,064	13,249	PL 77-228.					
					FI		342.6	
1,946.0	1,875.0	13,249	0 HD 892-76, PL-78-534.					
Harry S Truman Dam & Res.....								
			MO Benton.....	Osage R.....	F		4,005.9	739.6
706.0	209,300	55,600	PL 83-780.					
					FPCR		1,203.4	
706.0	635.0	55,600	0 HD 549-81, PL 87-874.					
HD 578-87.								
Hillsdale Lk.....								
			KS Miami.....	Big Bull Cr....	F		83.6	931.0
917.0	7,410	4,580	PL 83-780.					
					FNMCAR		76.3	
917.0	852.4	4,580	0 HD 642-81.					
Holmes Park Lk & Dam 17.....								
			NE Lancaster....	Antelope Cr	F		5.7	1,266.0
1,242.4	410	100	PL 85-500.					
Trib to Salt Cr.								
					FCR		0.8	
1,242.4	1,218.0	100	3 HD 396-84.					
Kanopolis Lk.....								
			KS Ellsworth....	Smoky Hill R...	F		370.0	1,508.0
1,463.0	13,999	3,560	PL 75-761.					
					FI		55.8	
1,463.0	1,425.0	3,560	0 PL 78-534, HD 842-76.					
Kelly Road Dam.....								
			CO Arapahoe.....	Westerly Cr....	F		0.3	5,362.0
5,342.0	38	0	PL 80-858, PL 84-99.					
Long Branch Lk.....								
			MO Randolph....	Little East Fk	F		30.4	801.0
791.1	3,670	2,429	PL 89-298.					
Chariton R.								
					FCAR		34.6	
791.0	751.1	2,429	0 HD 238-89.					
Longview Lk.....								
			MO Jackson.....	Little Blue R..	F		24.8	909.0
891.0	1,960	930	PL 90-483.					
					FCAR		22.1	
891.0	810.0	930	0 HD 169-90.					
Melvern Lk.....								
			KS Osage.....	Marais des	F		208.4	1,057.0
1,036.0	13,948	6,928	PL 83-780.					
Cygnes R.								
					FNMCAR		154.4	
1,036.0	960.0	6,928	0 PL 75-761, HD 549-81.					
Milford Lk.....								
			KS Geary.....	Republican R...	F		756.7	1,176.2
1,144.4	27,255	17,270	PL 83-780.					
					FCA		388.8	
1,144.4	1,080.0	15,709	0 HD 642-81, PL 75-761.					
Oahe Dam & Lk.....								
			ND 4 Counties...	Missouri R.....	F		1,097.0	1,620.0
1,617.0	373,000	359,000	PL 78-534.					
					FNPIMCAR		16,789.0	1,617.0
1,540.0	359,000	117,000	SD 247-78.					
Olive Cr Lk & Dam 2.....								
			NE Lancaster....	Olive Br of	F		4.0	1,350.0
1,335.0	355	174	HD 396-84.					
Salt Cr.								
					FCR		1.5	
1,335.0	1,314.0	174	4 PL 85-500.					
Papio Dam Site <greek-i>18 &								
			NE Douglas.....	Boxelder Cr	F		7.1	1,128.2
1,110.0	595	255	PL 90-483.					
Lk. Papio Cr.								
					FCAR		3.4	
1,110.0	1,060.5	255	0 HD 349-90.					
Papio Dam Site <greek-i>20 &								
			NE Sarpy.....	Trib South	F		6.1	1,113.1
1,096.0	493	246	PL 90-483.					
Lk. Branch Papio.								
					FCAR		2.7	
1,096.0	1,069.0	246	10 HD 349-90.					
Pawnee Lk & Dam 14.....								
			NE Lancaster....	No. Middle Cr	F		21.0	1,263.5
1,244.3	1,470	728	PL 85-500.					
of Salt Cr.								
					FCR		8.5	
1,244.3	1,206.0	728	1 HD 396-84.					
Perry Lk.....								
			KS Jefferson....	Delaware R.....	F		521.9	920.6
891.5	25,342	12,202	PL 83-780.					
					FN		243.2	
891.5	825.0	122	0 HD 642-81.					

Pipestem Dam & Res.....	ND Stutsman.....	Pipestem Cr....	F	137.0	1,496.3
1,442.4	4,754	885 PL 89-298.			
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1,442.4	1,415.0	885	62 HD 266-89.	FRC	9.6
Pomme De Terre Lk.....	MO Polk.....	Pomme De Terre	F	407.2	874.0
839.0	15,980	7,890 PL 75-761.			
R.					
839.0	750.0	7,890	0 HD 549-81, PL 83-780.	FNPCAR	241.6
Pomona Lk.....	KS Osage.....	110 Mile Cr....	F	176.8	1,003.0
974.0	8,520	400 PL 83-780.			
FNMAR					
974.0	912.0	4,000	0 HD 549-81.		70.6
Rathbun Lk.....	IA Appanoose....	Chariton R.....	F	346.3	926.0
904.0	20,948	11,013 PL 83-780.			
FNM					
904.0	844.0	11,013	0 HD 561-81.		205.4
Smithville Lk.....	MO Clay.....	Little Platte R	F	101.8	876.2
864.2	9,995	7,192 PL 89-298.			
FMCAR					
864.2	799.0	7,192	0 HD 262-89.		144.6
Spring Gulch Imbankment.....	CO Douglas.....	Spring Gulch...	F	1.8	5,600.00
5,535.0	88	0 PL 81-516, HD 669-80.			
Stagecoach Lk & Dam 9.....	NE Lancaster....	Hickman Br of	F	4.7	1,285.0
1,271.1	490	196 PL 85-500.			
Salt Cr.					
<ls-thn-eq>				FRC	1.9
1,271.1	1,246.0	196	0 HD 396-84.		
Standing Bear Lk & Dam 16....	NE Douglas.....	Trib Big	F	3.7	1,121.0
1,104.0	302	137 PL 90-483.			
Papillion Cr.					
1,104.0	1,060.0	137	0 HD 349-90.	FRC	1.5
Stockton Lk.....	MO Cedar.....	Sac R.....	F	779.6	892.0
867.0	38,288	24,777 PL 83-780.			
FARPN					
867.0	760.0	24,777	0 HD 549-89.		887.1
Tuttle Creek Lk.....	KS Riley.....	Big Blue R.....	F	1,937.4	1,136.0
1,075.0	54,179	14,875 PL 75-761.			
FN					
1,075.0	1,061.0	14,875	0 HD 842-76.		177.1
Twin Lakes & Dam 13.....	NE Seward.....	Middle Cr Salt	F	5.3	1,355.0
1,341.0	505	255 PL 85-500.			
Cr.					
1,341.0	1,306.0	255	1 HD 396-84.	CFR	2.8
Wagon Train Lk & Dam 8.....	NE Lancaster....	Hickman Br of	F	6.8	1,302.0
1,287.8	660	303 PL 85-500.			
Salt Cr.					
1,287.8	1,260.0	303	4 HD 396-84.	FRC	2.5
Wehrspann Lk & Dam 20.....	NE Sarpy.....	Trib South	F	6.1	1,113.1
1,096.0	493	246 PL 90-483.			
Branch Papio.					
1,096.0	1,069.0	246	10 HD 349-90.	FCAR	2.7
Wilson Lk.....	KS Russell.....	Saline R.....	F	530.7	1,554.0
1,516.0	19,980	9,040 PL 78-534.			
FRC					
1,516.0	1,440.0	9,040	0 SD 191-78, SD 247-78.		247.8
Yankee Hill Lk & Dam 10.....	NE Lancaster....	Cardwell Br of	F	5.6	1,262.0
1,244.9	475	208 PL 85-500.			
Salt Cr.					
1,244.9	1,218.0	208	0 HD 396-84.	FRC	2.0

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North Atlantic Division  
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Almond Lake.....	NY Steuben.....	Canacadea Cr...	F	14.6	1,300.0
1,255.0	489	124 PL 74-738.			
Alvin R. Bush Dam.....	PA Clinton.....	Kettle Cr.....	F	73.4	937.0
840.0	1,430	160 FCA Sep 54.			
Arkport Dam.....	NY Steuben.....	Canisteo R.....	F	8.0	1,304.0
1,218.0	192	0 PL 74-738.			
Aylesworth Cr Lk.....	PA Lackawanna...	Aylesworth Cr..	F	1.7	1,150.0

1,108.0	87	7	PL 87-874.					
Beltzville Dam & Lk.....			PA Carbon,	Pohopoco Cr....	F		27.0	651.0
628.0	1,411	947	PL 87-874.					
			Monroe.					
					FMA		39.8	
628.0	537.0	947	113 .....					
Bloomington Lk.....			MD Garret.....	North Branch	F		36.2	1,500.0
1,466.0	1,184	952	PL 87-874.					
				Potomac R.				
					FMA		92.0	
1,466.0	1,255.0	952	42 .....					
Blue Marsh Dam & Lk.....			PA Lebanon Berks	Tulpehocken CR.	F		27.1	307.0
290.0	2,159	1,147	PL 87-874.					
					FMA		19.9	
290.0	261.0	1,147	323 .....					
Cowanesque Lk.....			PA Tioga.....	Cowanesque R...	F		82.0	1,117.0
1,045.0	2,060	410	PL 85-500.					
Curwensville Lk.....			PA Clearfield...	West Branch	F		114.7	1,228.0
1,162.0	3,020	790	FCA Sep 54.					
				Susquehanna R.				
East Sidney Lk.....			NY Delaware.....	Ouleout Cr.....	F		30.2	1,203.0
1,150.0	1,100	210	PL 74-738.					
Foster Joseph Sayers Dam....			PA Centre.....	Bald Eagle Cr..	F		70.2	657.0
630.0	3,450	1,730	FCA Sept 54.					
Francis E. Walter Dam & Res..			PA Carbon,	Lehigh R.....	F		107.8	1,450.0
1,300.0	1,830	80	PL 79-526.					
			Luzerne, Monroe.					
Gathright Dam & Lk Moomaw....			VA Alleghany,	Jackson R.....	F		79.9	1,610.0
1,582.0	3,160	2,530	PL 79-526.					
			Bath.					
					AR		60.7	
1,582.0	1,554.0	2,530	1,780 .....					

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General Edgar Jadwin Dam....			PA Wayne.....	Dyberry Cr.....	F		24.5	1,053.0
973.0	659	0	PL 80-858.					
Prompton Dam & Res.....			PA Wayne.....	W Br Lackawaxen	F		48.5	1,205.0
1,125.0	910	290	PL 80-858.					
				R.				
Raystown Lk.....			PA Huntingdon...	Raystown Br....	F		248.0	812.0
786.0	10,800	8,300	PL 87-874.					
					FR		514.0	
786.0	622.8	8,300	150 .....					
Stillwater Lk.....			PA Susquehanna..	Lackawanna R...	F		11.6	1,621.0
1,572.0	422	83	PL 77-228.					
Tioga-Hammond Lakes Hammond..			PA Tioga.....	Crooked Cr.....	F		54.2	1,131.0
1,086.0	1,770	680	PL 85-500.					
Tioga-Hammond Lakes Tioga....			PA Tioga.....	Tioga R.....	F		52.5	1,131.0
1,081.0	1,630	470	PL 85-500.					
Whitney Piont Lk.....			NY Broome.....	Otselic R.....	F		66.5	1,010.0
973.0	3,340	1,200	PL 74-738.					
York Indian Rock Dam.....			PA York.....	Codorus Cr.....	F		28.0	435.0
370.0	1,430	0	PL 74-738.					

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North Central Division  
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Badhill Dam & Res.....			ND Barnes.....	Sheyenne R.....	FM		68.6	1,266.0
1,257.2	5,430	4,430	FCA Dec 44.					
Brandon Road L&D.....			IL Will.....	Illinois R.....	N		8.0	539.0
538.0	300	250	PL 71-126.					
Cedars L&D.....			WI Outagamie....	Fox R.....	N		1.8	703.6
698.7	255	140	RHA of 1882, 1885.					
Coralville Dam & Res.....			IA Johnson.....	Iowa R.....	F		439.0	712.0
680.0	24,800	3,580	PL 75-761.					
					C		40.3	
680.0	652.0	3,580	0 PL 75-761.					
Depree L&D.....			WI Brown.....	Fox R.....	N		9.4	591.0
586.7	926	0	PL 71-126.					
Dresden Island L&D.....			IL Grundy.....	Illinois R.....	N		1.0	505.0
504.0	1,690	1,550	FCA 1958.					
Eau Galle Dam & Res.....			WI Pierce.....	Eau Galle R....	F		1.6	940.0
938.5	1,500	1,350	PL 78-534.					
Farmdale Dam.....			IL Tazwell.....	Farm Cr.....	F		11.3	616.0
551.0	385	0	PL 78-534.					
Fondulac Dam.....			IL Tazwell.....	Fondulac Cr....	F		2.3	579.0
530.0	97	0	PL 78-534.					
Gull Lk Dam & Res.....			MN Cass.....	Gull R.....	N		70.4	1,194.0

1,192.7	13,100	12,700	RHA	1899.					
Highway 75 Dam & Res.				MN Bigstone,	Minnesota R....	FC	11.1	952.3	
947.3	2,790	910	FCA	Oct 65.					
				Lacqui, Parle.					
Homme Dam & Res.				ND Walsh.	Park R.....	FM	3.7	1,080.0	
1,074.0	190	176	FCA	of 22 Dec 44.					
L&D 1.				MN Hennepin,	Mississippi R..	N	13.0	725.1	
722.8	5,800	5,500	RHA	1910.					
				Ramsey.					
L&D 2.				MN Dakota, Wash.	Mississippi R..	N	8.0	687.2	
686.5	11,810	11,000	RHA	1927.					
L&D 3.				MN Goodhue,	Mississippi R..	N	17.8	675.0	
674.0	17,950	17,650	RHA	1930.					
				Pierce.					
L&D 4.				WI Wabasha,	Mississippi R..	N	18.0	667.0	
666.5	38,820	36,600	RHA	1930.					
				Buffalo.					
L&D 5.				MN Winona,	Mississippi R..	N	6.2	660.0	
659.5	12,680	12,000	RHA	1930.					
				Buffalo.					
L&D 5A.				MN Winona,	Mississippi R..	N	7.2	651.0	
650.0	7,500	7,000	RHA	1930.					
				Buffalo.					
L&D 6.				MN Winona.	Mississippi R..	N	8.4	645.5	
644.5	8,870	8,000	RHA	1930.					
L&D 7.				MN Winona.	Mississippi R..	N	2.6	639.0	
639.0	13,440	13,400	RHA	1930.					
				WI LaCrosse.					
L&D 8.				MN Houston.	Mississippi R..	N	20.4	631.0	
630.0	20,800	20,000	RHA	1930.					
				WI Vernon.					
L&D 9.				WI Crawford.	Mississippi R..	N	28.7	620.0	
619.0	29,125	28,300	RHA	1930.					
				IA Allamakee.					
L&D 10.				IA Clayton.	Mississippi R..	N	16.8	611.0	
610.0	17,070	16,500	RHA	1930.					
				WI Grant.					
L&D 11.				IA Dubuque.	Mississippi R..	N	19.1	603.1	
602.0	21,100	20,000	PL	71-520.					
L&D 12.				IA Jackson.	Mississippi R..	N	12.2	592.1	
591.0	13,000	12,400	PL	71-520.					
L&D 13.				IL Whiteside.	Mississippi R..	N	24.2	583.1	
582.0	30,000	28,500	PL	71-520.					
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L&D 14.				IA Scott.	Mississippi R..	N	9.0	572.1	
571.0	10,500	9,980	PL	71-520.					
L&D 15.				IL Rock Island.	Mississippi R..	N	5.5	561.1	
559.0	3,725	3,540	PL	71-520.					
L&D 16.				IL Rock Island.	Mississippi R..	N	12.1	545.1	
544.0	13,000	12,400	PL	71-520.					
L&D 17.				IL Mercer.	Mississippi R..	N	7.5	537.1	
536.0	7,580	7,200	PL	71-520.					
L&D 18.				IL Henderson.	Mississippi R..	N	11.0	529.1	
528.0	13,300	12,600	PL	71-520.					
L&D 19.				IA Lake.	Mississippi R..	N	55.0	518.2	
517.2	33,500	31,800	PL	71-520.					
L&D 20.				MO Lewis.	Mississippi R..	N	5.8	481.5	
476.5	7,960	7,550	PL	71-520.					
L&D 21.				IL Adams.	Mississippi R..	N	8.6	470.1	
469.6	9,390	8,910	PL	71-520.					
L&D 22.				MO Polke.	Mississippi R..	N	8.4	459.6	
459.1	8,660	8,230	PL	71-520.					
Lac qui Parle Dam & Res.				MN Chippewa	Minnesota R....	FC	119.3	941.1	
931.2	13,500	6,400	FCA	of 22 Jun 36.					
				Swift.					
Lagrange L&D.				IL Brown.	Illinois R....	N	0.0	429.0	
429.0	10,500	10,500	PL	73-184.					
Leech Lake Dam & Res.				MN Cass.	Leech R.....	N	300.2	1,295.7	
1,293.2	139,000	107,200	RHA	of 1882 1895.					
Little Kaukauna L&D.				WI Brown.	Fox R.....	N	3.6	601.0	
592.8	447	42.0	RHA	of 1882 1885.					
Little Chute L&D.				WI Outagamie.	Fox R.....	N	0.4	694.2	
688.9	74	67	RHA	of 1882 1885.					
Lockport Lock.				IL Will.	Chicago San	FNP	2.7	579.0	

577.5	1,850	1,800	RHA 1930.	Ship Canal.				
Lower Appleton L&D.....			WI Outagamie....	Fox R.....	N	0.2	710.9	
706.3	43	40	RHA of 1882 1895.					
Marseilles Lk & Dam.....			IL LaSalle.....	Illinois R.....	N	0.7	483.0	
482.8	1,400	1,320	PL 71-126.					
Marsh Lake Dam & Res.....			MN Swift,	Minnesota R....	FC	23.9	941.1	
937.6	8,650	5,150	FCA Jun 36.					
			Lacqui, Parle.					
Menasha Dam Lk Winnebago.....			WI Winnebago....	Fox R.....	FN	452.0	746.8	
743.5	181,120	168,500	.....					
Mount Morris Dam.....			NY Livingston...	Genesee R.....	F	337.4	760.0	
585.0	3,300	0	PL 74-738.					
O'Brien L&D.....			IL Cook.....	Calumet.....	N	0.3	581.9	
578.2	50	50	RHA of 1946.					
Peoria L&D.....			IL Peoria.....	Illinois R.....	N	0.0	440.0	
440.0	27,800	27,800	PL 73-184.					
Pine Dam & Res.....			MN Crow Wing....	Pine R.....	N	40.4	1,230.3	
1,227.3	13,900	13,000	RHA of 1899.					
Pokegama Dam & Res.....			MN Itasca.....	Mississippi R..	N	52.4	1,274.4	
1,270.3	13,700	12,000	RHA of 1899.					
Rapid Croche L&D.....			WI Outagamie....	Fox R.....	N	3.4	608.5	
602.1	568	0	RHA 1885.					
Red Lake Dam & Res.....			MN Clearwater...	Red Lake R.....	FA	1,810.0	1,174.0	
1,173.5	288,800	287,300	FCA Dec 44.					
Red Rock Dam & Res.....			IA Marion.....	Des Monies R...	F	1,670.0	780.0	
728.0	65,400	8,000	PL 75-761.					
					R		72.0	
728.0	690.0	8,000	0 PL 75-761.					
Reservation Control Res.....			MN Traverse.....	.....	FC	58.8	981.0	
976.0	12,400	10,950	FCA 1936.					
			SD Roberts.....					
Sandy Lake Dam & Res.....			MN Aitkin.....	Sandy R.....	N	37.5	1,218.3	
1,214.3	10,600	8,200	RHA of 1899.					
Saylorville Dam & Res.....			IA Polk.....	Des Moines R...	F	586.0	890.0	
836.0	16,700	5,950	FCA 1936.					
					P		90.0	
836.0	810.0	5,950	0 FCA.					
St Anthony Falls Lwr L&D....			MN Hennepin....	Mississippi R..	N	0.0	750.0	
750.0	50	50	RHA of 1937 1945.					
St Anthony Falls Up L&D....			MN Hennepin....	Mississippi R..	N	17.4	801.0	
799.0	8,800	8,600	RHA of 1937 1945.					
Starved Rock L&D.....			IL LaSalle.....	Illinois R.....	N	1.0	459.0	
458.0	1,155	1,020	PL 69-100.					
Upper Appleton L&D.....			WI Outagamie....	Fox R.....	N	7.4	738.7	
735.4	1,171	1,040	RHA of 1882 1885.					
Upper Kaukauna L&D.....			WI Outagamie....	Fox R.....	N	1.1	656.8	
652.8	134	115	RHA of 1882 1885.					
White Rock Dam & Res.....			MN Traverse.....	Bois De Souix..	FC	78.6	981.0	
972.0	10,500	4,000	FCA 1936.					
			SD Roberts.....					
Winnibigoshish Dam & Res.....			MN Cass Itasca..	Mississippi R..	N	98.7	1,300.9	
1,296.9	98,700	62,000	RHA of 1899.					

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New England Division  
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Ball Mountain Lk.....			VT Windham.....	West R.....	F	52.4	1,017.0	
830.5	810	20	PL 78-534, 83-780.					
Barre Falls Dam.....			MA Worcester....	Ware R.....	F	24.0	807.0	
761.0	1,400	0	PL 78-228.					
Birch Hill Dam.....			MA Worcester....	Millers R.....	F	49.9	852.0	
815.0	3,200	0	PL 75-761.					
Black Rock Lk.....			CT Litchfield...	Branch Brook...	F	8.5	520.0	
437.0	190	21	PL 86-45.					
Blackwater Dam.....			NH Merrimack....	Blackwater R...	F	46.0	566.0	
515.0	3,280	0	PL 75-111.					
Buffumville Lk.....			MA Worcester....	Little R.....	F	11.3	524.0	
492.5	530	200	PL 77-228.					

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Colebrook River Lk.....			CT Litchfield...	West Branch....	F	50.2	761.0	
708.0	1,185	750	PL 86-645.					
			MA Bekshire.....	Farmington R...				
Conant Brook Dam.....			MA Hampden.....	Conant Brook...	F	3.7	757.0	
694.0	158	0	PL 86-645.					
East Brimfield Lk.....			MA Hampden,	Quinebaug R....	F	29.9	653.0	
632.0	2,300	360	PL 77-228.					

			Worcester.						
Edward MacDowell Lk.	911.0	840	165	PL	NH Hillsboro....	Nubanusit Brook	F	12.8	946.0
Everett Lk.	340.0	2,900	130	PL	NH Hillsboro, 75-761.	Piscataquog R..	F	91.5	418.0
			Merrimack.						
Franklin Falls Dam.	307.0	2,800	440	PL	NH Belknap, 75-111.	Pemigewasset R.	F	150.6	389.0
			Merrimack.						
Hancock Brook Lk.	460.0	266	40	PL	CT Litchfield... 86-645.	Hancock Brook..	F	3.9	484.0
Hodges Village Dam.	465.5	740	0	PL	MA Worcester.... 77-228.	French R.....	F	13.3	501.0
Hop Brook Lk.	310.0	270	21	PL	CT New Haven.... 86-645.	Hop Brook.....	F	6.9	364.0
Hopkinton Lk.	380.0	3,700	220	PL	NH Merrimack.... 75-761.	Contoocook R...	F	70.1	416.0
Knightville Dam.	480.0	960	0	PL	MA Hampshire.... 75-761.	Westfield R....	F	49.0	610.0
Littleville Lk.	518.0	510	275	PL	MA Hampden, 85-500.	Middle Br,	F	23.0	576.0
			Hampshire.			Westfield R.			
Mansfield Hollow Lk.	205.5	1,880	200	PL	CT Tolland..... 77-228.	Natchaug R.....	F	49.2	257.0
New Bedford-Fairhaven	0.0	0	0	PL	MA Bristol..... 85-500.		F	0.0	0.0
			Barrier.						
North Hartland Lk.	425.0	1,100	215	PL	VT Windsor..... 75-761.	Ottawaquechee R.	F	68.8	546.5
North Springfield Lk.	467.0	1,200	100	PL	VT Windsor..... 75-761.	Black R.....	F	50.0	545.5
Northfield Br Lk.	500.0	67	7	PL	CT Litchfield... 86-645.	Northfield Br..	F	2.4	576.0
Otter Br Lk.	701.0	374	70	PL	NH Cheshire..... 83-780.	Otter Brook....	F	17.6	781.0
Stamford Hurr Barrier.	0.0	0	0	PL	CT Fairfield.... 86-645.		F	0.0	0.0
Surry Mountain Lk.	500.0	970	260	PL	NH Cheshire..... 75-761.	Ashuelot R.....	F	31.7	550.0
Thomaston Dam.	380.0	960	0	PL	CT Litchfield... 78-534.	Naugatuck R....	F	42.0	494.0
Townshend Lk.	478.0	735	95	PL	VT Windham..... 78-534, PL 83-780.	West R.....	F	32.9	553.0
Tully Lk.	636.0	1,130	78	PL	MA Worcester.... 75-761.	East Br Tully R	F	20.5	668.0
Union Village Dam.	420.0	740	0	PL	VT Orange..... 74-738.	Ompompanoosuc R	F	38.0	564.0
West Hill Dam.	234.0	1,025	0	PL	MA Worcester.... 78-534.	West R.....	F	12.4	264.0
West Thompsen.	305.0	1,250	200	PL	CT Windham..... 86-645.	Quinebaug R....	F	25.6	342.5
Westville Lake.	525.0	913	23	PL	MA Worcester.... 77-228.	Quinebaug R....	F	11.0	572.0

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North Pacific Division  
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Albeni Falls Dam, Lk	2,049.7	95,000	86,000	PL	ID Bonner..... 81-516.	Pend Oreille R.	FNP	1,155.0	2,062.5
			Oreille.						
Applegate Lk.	1,854.0	988	221	FCA	OR Jackson..... 1962, PL 87-874, PL	Applegate R....	FIR	75.2	1,987.0
			87-874.						
Big Cliff Dam.	1,182.0	130	98	HD	OR Marion, Linn. 544, PL 75-761, PL	N Santiam R....	P	3.5	1,206.0
			87-874.						
Blue River Lk.	1,350.0	975	940	HD	OR Lane..... 531.	Blue R.....	F	6.5	1,357.0
							FNI	78.8	
Bonneville L&D Lk.	70.0	20,800	19,850	RHA	WA Skamania..... 1935.	Columbia R.....	NP	138.0	77.0
Chena River Lakes.	490.0	5,400	400	PL	AK North Star 90-483.	Chena R.....	F	34.0	506.7
			Burough.						
Chief Joseph Dam	930.0	8,400	6,800	HD	WA Douglas, 693, PL 79-525.	Columbia R.....	P	192.3	956.0
			Lk.		Okanogan.				

Cottage Grove Lk.....	OR Lane.....	Coast Fk,	F	29.8	791.0
750.0 1,155 295 HD 544, PL 75-761.		Willamete R.			
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Cougar Lk.....	OR Lane.....	South Fk.....	F	11.3	1,699.0
1,690.0 1,280 1,235 HD 531.			FNPI	143.9	
1,690.0 1,532.0 1,235 635 PL 81-516.			P	9.9	
1,532.0 1,516.0 635 602 PL 83-870.					
Detroit Lk.....	OR Marion.....	North Santiam..	F	19.1	1,569.0
1,563.0 3,490 3,455 HD 544, PL 75-761.			FNPI	281.6	
1,563.5 1,450.0 3,455 1,725 .....			P	40.3	
1,450.0 1,425.0 1,725 1,415 .....					
Dexter Dam.....	OR Lane.....	Middle Fk,	FNPI	4.8	695.0
690.0 990 940 HD 544, PL 75-761.		Willamette R.			
Dorena Lk.....	OR Lane.....	Cow R.....	F	5.5	835.0
832.0 1,885 1,815 HD 544.			FNI	65.0	
832.0 770.5 1,815 520 PL 75-761.					
Dworshak Dam and Res.....	ID Clearwater...	North Fk,	FNP	2,016.0	1,600.0
1,445.0 17,090 9,050 HD 403, PL 87-874.		Clearwater R.			
Fall Cr Dam and Lk.....	OR Lane.....	Fall Cr.....	F	7.5	834.0
830.0 1,865 1,760 HD 531.			FNI	107.5	
830.0 728.0 1,760 460 PL 81-516					
Fern Ridge Lk.....	OR Lane.....	Long Tom R.....	F	15.7	375.1
373.5 10,305 9,340 HD 544.			FNI	93.9	
373.5 353.0 9,340 1,515 PL 75-761					
Foster Lake.....	OR Linn.....	South Santiam R	F	4.9	641.0
637.0 1,260 1,195 HD 544			FNPI	24.9	
637.0 613.0 1,195 895 PL 86-645					
Green Peter Lk.....	OR Linn.....	Middle Fk,	F	18.3	1,015.0
1,010.0 3,705 3,605 HD 531.		Santiam R.	FNPI	249.9	
1,010.0 992.0 3,605 2,072 PL 81-516, PL 83-780.					
Hills Creek Lk.....	OR Lane.....	Middle Fk,	F	5.6	1,543.0
1,541.0 2,850 2,710 HD 531.		Willamette R.	FNPI	194.6	
1,541.0 1,448.0 2,710 1,575 PL 81-516.					
Howard Hanson Dam.....	WA King.....	Green R.....	F	80.0	1,206.0
1,141.0 1,750 763 HD 531.			FA	25.6	
1,141.0 1,040.0 763 13 PL 81-516.					
Ice Harbor Dam Lk Sacajawea..	WA Walla, Walla,	Snake R.....	NP	24.9	440.0
437.0 8,370 8,210 HD 704, PL 79-14.	Franklin.				
John Day Dam Lk Umatilla.....	OR Sherman.....	Columbia R.....	F	158.0	268.0
265.0 55,000 52,000 HD 531.			FNPI	150.0	
265.0 262.0 52,000 49,000 PL 81-516.			F	192.0	
262.0 257.0 49,000 42,000 .....					
Libby Dam Lk Koocanusa.....	MT Lincoln.....	Kootenai R.....	FP	4,979.5	2,459.0
2,287.0 46,365 14,391 HD 531, PL 81-516.					
Little Goose L&D Lk Bryan....	WA Columbia,	Snake R.....	PN	49.0	638.0
633.0 10,030 9,620 HD 704, PL 79-14.	Whitman.				
Lookout Point Lk.....	OR Lane.....	Middle Fk,	P	12.2	825.0
819.0 2,090 1,860 HD 544.		Willamette R.	FNPI	324.2	
926.0 825.0 4,255 2,090 PL 75-761.					
Lost Creek Lk.....	OR Jackson.....	Rogue R.....	FPIR	315.0	1,872.0
1,751.0 3,430 1,800 HD 566, PL 87-874.					
Lower Granite L&D.....	WA Garfield,	Snake R.....	NPI	43.6	738.0
733.0 8,900 8,540 HD 704, PL 79-14.	Whitman.				
Lucky Peak Dam and Lk.....	ID Ada.....	Boise R.....	F	13.9	3,060.0
3,055.0 2,817 2,745 PL 79-526.					

3,055.0	2,905.0	2,817	802	FI	264.4	
Lwr Monumental L&D	Lk HG West	WA Walla, Walla,	Snake R.....	NP	20.0	540.0
537.0	6,700	6,550	HD 704, PL 79-14.			
			Franklin.			
McNary L&D, Dam Lk	Wallula...	WA Benton.....	Columbia R.....	NP	185.0	340.0
335.0	38,800	36,000	HD 704, PL 79-14.			
			OR Umatilla.....			
Mill Creek Dam Lk.....	WA Walla, Walla.	Mill Cr.....	F	7.5	1,265.0	
1,205.0	225	53	HD 578, PL 75-761.			
Mud Mountain Dam.....	WA King, Pierce.	White R.....	F	106.3	1,215.0	
895.0	963	0	PL 74-738.			
The Dalles L&D Lk	Celilo.....	WA Klickitat....	Columbia R.....	NP	52.5	160.0
155.0	11,200	10,350	HD 531, PL 81-516.			
			OR Wasco.....			
Willow Creek Lk.....	OR Morrow.....	Willow Cr.....	F	11.6	2,113.5	
2,047.0	269	96	PL 89-298.			
Wynoochee Dam and Lk.....	WA Grays, Harbor	Wynoochee R....	FMCA	65.4	800.0	
700.0	1,170	193	HD 601, PL 93-251.			

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Allegheny L&D 2.....	PA Allegheny....	Allegheny R....	N	0.0	721.0
710.0	0	RHA 1935.			
Allegheny L&D 3.....	PA Allegheny....	Allegheny R....	N	0.0	734.5
721.0	0	RHA 1935.			

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Allegheny L&D 4.....	PA Allegheny	Allegheny R....	N	0.0	745.0
734.5	0	RHA 1912.			
		Westmoreland.			
Allegheny L&D 5.....	PA Armstrong....	Allegheny R....	N	0.0	756.8
745.0	0	RHA 1912			
Allegheny L&D 6.....	PA Armstrong....	Allegheny R....	N	0.0	769.0
756.8	0	RHA 1912.			
Allegheny L&D 7.....	PA Armstrong....	Allegheny R....	N	0.0	782.1
769.0	0	RHA 1912.			
Allegheny L&D 8.....	PA Armstrong....	Allegheny R....	N	0.0	800.0
782.1	0	RHA 1912, 1935.			
Allegheny L&D 9.....	PA Armstrong....	Allegheny R....	N	0.0	822.0
800.0	0	RHA 1935.			
Allegheny Res Kinzua Dam.....	PA Warren.....	Allegheny R....	F	607.0	1,365.0
1,328.0	21,180	12,080	PL 74-738.		
			FPCAR	549.0	
1,328.0	1,240.0	12,080	1,900		
Alum Cr Lk.....	OH Delaware.....	Alum Cr.....	F	53.1	901.0
888.0	4,852	3,387	PL 87-874.		
			FMCR	79.2	
888.0	885.0	3,387	3,105		
Atwood Lk.....	OH Tuscarawas...	Indian Fk Cr...	F	26.1	941.0
928.0	2,460	1,540	PW 1933.		
			FCR	7.6	
928.0	922.5	1,540	1,250		
Barkley Dam Lk Barkley.....	Ky Lyon, Livgst.	Cumberland R...	F	1,213.0	375.0
359.0	93,430	57,920	PL 79-525.		
			FP	259.0	
359.0	354.0	57,920	45,210		
			N	610.0	
354.0	233.0	45,210	0		
Barren River Lk.....	KY Allen, Barren	Barren R.....	F	558.8	590.0
552.0	20,150	10,000	PL 75-261.		
			FMR	190.3	
552.0	525.0	10,000	4,340		
Beach City Lk.....	OH Tuscarawas...	Sugar Cr.....	F	69.9	976.5
948.0	6,150	420	PW 1933.		
			FCR	0.0	
0.0	0.0	0	420		
Beech Fk Lk.....	WV Wayne.....	Beech Fk Cr....	F	28.3	614.5
592.0	1,847	725	PL 87-874.		
			FCR	5.0	
592.0	583.5	725	460		
Belleville L&D.....	WV Wood.....	Ohio R.....	N	0.0	582.0
560.0	0	0	RHA 1909.		
			OH Meigs.....		

Berlin Lk.....	OH Mahoning,	Mahoning R.....	F	38.3	1,032.0
1,024.7	5,500	3,590	PL 75-761.		
			Portage.		
				FMCAR	56.6
1,024.7	1,016.5	3,590	2,200 .....		
Bluestone Lk.....	WV Summers.....	New R.....	F	592.6	1,520.0
1,410.0	9,180	2,040	PL 74-738.		
				FCR	7.5
1,410.0	1,406.0	2,040	1,800 PL 75-761.		
Bolivar Dam.....	OH Stark,	Sandy Cr.....	F	149.6	962.0
895.0	6,500	0	PW 1933.		
			Tuscarawas.		
Brookville Lk.....	IN Franklin.....	E Fork of	FMR	128.4	748.0
713.0	5,260	2,430	PL 75-761.		
			Whitewater R.		
Buckhorn Lk.....	KY Leslie.....	Middle Fk of	F	135.8	840.0
782.0	3,610	1,230	PL 75-761.		
			Kentucky R.		
782.0	757.0	1,230	550 .....	FR	21.8
Burnsville Lk.....	WV Braxton.....	L Kanawha R....	F	51.5	825.0
789.0	1,902	965	PL 75-761.		
				FCAR	10.2
789.0	776.0	965	553 .....		
CJ Brown Dam & Res.....	OH Clark.....	Buck Cr.....	F	26.8	1,023.0
1,012.0	2,720	2,120	PL 87-874.		
CM Harden Lk.....	IN Parke.....	Raccoon Cr.....	F	83.5	690.0
661.0	3,910	2,060	PL 75-761		
				FAR	33.1
661.0	640.0	2,060	1,100 .....		
Caesar Cr Lk.....	OH Warren.....	Caesar Cr.....	F	140.2	883.0
849.0	6,110	2,830	PL 75-761.		
				FMAR	88.7
849.0	800.0	2,830	700 .....		
Cagles Mill Lk.....	IN Putman.....	Mill Cr.....	F	201.0	704.0
636.0	4,840	1,400	PL 75-761.		
Cannelton L&D.....	KY Hancock.....	Ohio R.....	N	0.0	383.0
358.0	0	0	RHA 1909		
			IN Perry.....		
.....	.....	.....	.....		
Carr Fk Lk.....	KY Knott.....	Carr Cr.....	F	25.1	1,055.0
1027.0	1,120	710	PL 87-874.		
				FAR	10.8
1,027.0	1009.0	710	530 .....		
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Cave Run Lk.....	KY Rowan.....	Licking R.....	F	391.5	765.0
730.0	14,870	8,270	PL 74-738		
				FAR	75.3
730.0	720.0	8,270	6,790 .....		
Center Hill Lk.....	TN Dekalb.....	Caney FK.....	F	762.0	685.0
648.0	23,060	18,220	PL 75-761.		
				P	492.0
648.0	618.0	18,220	14,590 .....		
Charles Mill Lk.....	OH Ashland.....	Black Fk.....	F	80.6	1,020.0
997.0	6,050	1,350	PW 1933.		
				FCR	4.5
997.0	993.0	1,350	827 .....		
Cheatham L&D.....	TN Cheatham.....	Cumberland R...	P	19.8	385.0
382.0	7,450	5,630	RHA 1946, PL 396.		
				N	84.2
382.0	345.0	5,630	0 PL 396.		
Clendening Lk.....	OH Harrison.....	Brush Fk.....	F	27.5	910.5
898.0	2,620	1,800	PW 1933.		
				FCR	8.0
898.0	893.0	1,800	1,430 .....		
Conemaugh River Lk.....	PA Indiana,	Conemaugh R....	F	270.0	975.0
880.0	6,820	300	PL 74-738, PL 75-761.		
			Westmoreland.		
Cordell Hull Dam & Res.....	TN Smith.....	Cumberland R...	PR	17.8	504.5
499.0	12,200	9,820	RHA 1946.		
				NR	0.0
499.0	424.0	9,820	0 .....		
Crooked Cr Lk.....	PA Armstrong.....	Crooked Cr.....	F	89.4	920.0
840.0	1,940	350	PL 74-738, PL 75-761.		
Dale Hollow Lk.....	TN Clay.....	Obey R.....	F	353.0	663.0
651.0	30,990	27,700	PL 75-761.		
				P	496.0
651.0	631.0	27,700	21,880 .....		

Dashields L&D	682.0	0	0	PA Allegheny	Ohio R.	N	0.0	692.0
Deer Cr Lk	810.0	4,046	1,277	OH Pickaway	Deer Cr	F	81.5	844.0
				75-761.				
						FCR	14.6	
Delaware Lk	915.0	8,550	1,270	OH Delaware	Olentangy R.	F	118.0	947.0
				75-761				
						FCAR	5.6	
Dewey Lk	650.0	3,340	1,100	KY Floyd	Johns Cr	F	76.1	686.0
				75-761				
						FCR	4.9	
Dillon Lk	737.0	10,280	1,560	OH Muskingum	Licking R.	F	256.5	790.0
				75-761.				
						FCR	4.4	
Dover Dam	858.0	10,100	0	OH Tuscarawas	Tuscarawas R.	F	203.0	916.0
				1933.				
E Br Clarion River Lake	1,670.0	1,370	1,160	PA Elk	E Br Clarion R.	F	19.0	1,685.0
				78-526.				
						FCAR	19.8	
E Fk Res Wm H Harsha Lk	733.0	4,600	2,160	OH Clermont	E Fk Little	F	202.2	795.0
				75-761.				
					Miami R.			
						FMCAR	73.6	
East Lynn Lk	662.0	2,351	1,005	WV Wayne	E Fk Twelvepole	F	65.3	701.0
				75-761.				
						FCR	5.5	
Emsworth L&D	692.0	0	0	PA Allegheny	Ohio R.	N	0.0	710.0
				1909.				
Fishtrap Lk	757.0	2,681	1,131	KY Pike	Levisa Fk	F	126.7	825.0
				75-761.				
						FCAR	27.2	
Gallipolis L&D	515.0	0	0	WV Mason	Ohio R.	N	0.0	538.0
				1935.				
Grayson Lk	645.0	3,633	1,509	KY Carter	L Sandy R.	F	89.6	681.0
				86-645.				
						FCAR	10.7	
Green R L&D 1	337.3	0	0	KY Henderson	Green R.	N	0.0	349.1
				1888.				
Green R L&D 2	349.1	0	0	KY McLean	Green R.	N	0.0	363.4
				1888.				
Green River Lk	675.0	19,100	8,210	KY Taylor	Green R.	F	479.1	713.0
				75-761.				
						FAR	81.5	
Greenup L&D 3	485.0	0	0	KY Greenup	Ohio R.	N	0.0	515.0
				1909.				
Hannibal L&D	602.0	0	0	WV Wetzels	Ohio R.	N	0.0	623.0
				1909.				
Hildebrand L&D	814.0	0	0	WV Monongalia	Monongahela	N	0.0	835.0
				1950.				
Huntington Lk	749.0	7,900	900	IN Hunt	Wabash R.	F	140.6	798.0
				85-500.				
						FR	8.4	
J Percy Priest Dam & Res	490.5	22,720	14,400	TN Davidson	Stones R.	F	252.0	504.5
				75-761.				
						FP	15.0	
						FPR	0.0	
						PR	0.0	

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JW Flannagan Dam & Res	1,396.0	2,098	1,143	VA Dickenson	Pound R.	F	78.6	1,446.0
				PL 75-761.				
	1,396.0	1,380.0	1,143	310		FMCR	16.5	
Kentucky R L&D 1	421.8	0	0	RHA KY Carroll	Kentucky R.	N	0.0	430.0
				1879.				
Kentucky R L&D 2	430.0	0	0	RHA KY Henry Owen	Kentucky R.	N	0.0	444.0
				1879.				
Kentucky R L&D 3	444.0	0	0	RHA KY Henry Owen	Kentucky R.	N	0.0	457.1
				1879.				
Kentucky R L&D 4	457.1	0	0	RHA KY Franklin	Kentucky R.	N	0.0	470.4
				1879.				
Laurel River Lk	982.0	6,060	4,200	PL KY Laurel,	Laurel R.	P	185.0	1,018.5
				86-645.				
				Whitley.				
	982.0	760.0	4,200	0		R	250.6	
Leesville Lake	963.0	1,470	1,000	PW OH Carroll	McGuire Cr.	F	17.9	977.5
				1933.				
	963.0	957.0	1,000	829		FCR	5.5	
London L&D	590.0	0	0	RHA WV Kanawha	Kanawha R.	N	0.0	614.0
				1930.				
Loyalhanna Lk	910.0	3,280	210	PL PA Westmoreland	Loyalhanna Cr.	F	93.3	975.0
				74-738.				
	0.0	0.0	0	0	PL 75-761.	FC	0.0	
M J Kirwan Dam & Res	985.5	3,240	2,650	PL OH Portage	W. Br Mahoning	F	22.0	993.0
				74-738				
					R.			
	985.5	951.0	2,650	570	PL 75-761.	FCAR	52.9	
Mahoning Cr Lk	1,098.0	2,370	280	PL PA Armstrong	Mahoning Cr.	F	64.7	1,162.0
				74-738.				
	1,098.0	1,075.0	280	170	PL 75-761.	FRC	5.1	
Markland L&D	420.0	0	0	RHA IN Switzerland	Ohio R.	N	0.0	455.0
				1909				
					KY Gallatin			
Marmet L&D	566.0	0	0	RHA WV Kanawha R.	Kanawha	N	0.0	590.0
				1930.				
Martins Fk Lk	1,310.0	578	340	PL KY Harlan	Martins Fk of	F	14.3	1,341.0
				89-298.				
					Clover R.			
	1,310.0	1,300.0	340	274		FAR	3.1	
	1,300.0	1,265.0	274	0		R	3.7	
Maxwell L&D	743.5	0	0	RHA PA Fayette	Monongahela R.	N	0.0	763.0
				1909.				
					Washington.			
McAlpine L&D	383.0	0	0	RHA KY Jefferson	Ohio R.	N	0.0	420.0
				1909.				
					IN Clark			
Meldahl L&D	455.0	0	0	RHA KY Bracken	Ohio R.	N	0.0	485.0
				1909.				
					OH Clermont			
Mississinewa Lk	737.0	12,830	3,180	PL IN Miami	Mississinewa R.	F	293.2	779.0
				85-500.				
	737.0	712.0	3,180	1,280		FR	51.9	
Mohawk Dam	799.2	7,950	0	PW OH Coshocton	Walhonding R.	F	285.0	890.0
				1933.				
Mohicanville Dam	932.0	8,800	0	PW OH Ashland	Lk Fork	F	102.0	963.0
				1933.				
Monongahela R L&D 2	710.0	0	0	RHA PA Allegheny	Monongahela R.	N	0.0	718.7
				1902.				
Monongahela R L&D 3	718.7	0	0	RHA PA Allegheny	Monongahela R.	N	0.0	726.9
				1905.				
Monongahela R L&R 4	726.9	0	0	RHA PA Washington	Monongahela R.	N	0.0	743.5
				1909.				
					Westmoreland.			
Monongahela R L&D 7	763.0	0	0	RHA PA Greene,	Monongahela R.	N	0.0	778.0
				1922.				
					Fayette.			
Monongahela R L&D 8	778.0	0	0	RHA PA Greene,	Monongahela R.	N	0.0	797.0
				1922, 1950, 1973.				
					Fayette.			

Monroe Lk.....	IN Monroe.....	Salt Cr.....	F	258.8	556.0
538.0	18,450	10,750	FCA 1958.		
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538.0	515.0	10,750	3,280	FMA	159.9
Montgomery Island L&D.....	PA Beaver.....	Ohio R.....	N	0.0	682.0
664.5	0	0	RHA 1909.		
Morgantown L&D.....	WV Monongalia	N.....	0.0	814.0	797.0
0	0	RHA			
Monongahela R.					
1909.					
Mosquito Cr Lk.....	OH Trumbull.....	Mosquito Cr....	F	21.7	904.0
901.4	8,900	7,850	PL 75-761.		
901.4	899.9	7,850	7,220	FMCAR	80.4
N Br Kokosing River Lk.....	OH Knox.....	North Br of	F	13.9	1,146.0
1,121.0	1,140	154	PL 87-874.		
Kokosing R.					
N Fk Pound Lk.....	VA Wise.....	N Fk Pound R....	F	8.0	1,644.0
1,611.0	349	154	PL 86-645.		
FMCR					
1,611.0	1,601.0	154	106		1.3
New Cumberland L&D.....	WV Hancock.....	Ohio R.....	N	0.0	664.5
644.0	0	0	RHA 1909.		
OH Jefferson....					
Newburgh L&D.....	KY Henderson....	Ohio R.....	N	0.0	358.0
342.0	0	0	RHA 1909.		
IN Warrick.....					
Nolin Lk.....	KY Edmonson.....	Nolin R.....	F	439.2	560.0
515.0	14,530	5,790	PL 75-761.		
515.0	490.0	5,790	2,890	FR	106.4
Ohio R L&D 52.....	KY McCracken....	Ohio R.....	N	0.0	302.0
290.0	0	0	RHA 1909, 1910, 1918.		
IL Massac.....					
Ohio R L&D 53.....	KY Ballard.....	Ohio R.....	N	0.0	290.0
276.6	0	0	RHA 1909, 1910, 1918.		
IL Pulaski.....					
Old Hickory L&D.....	TN Davidson	Cumberland R....	P	63.0	445.0
442.0	22,500	19,550	RHA 1946.		
Sumner.					
442.0	375.0	19,550	0	N	357.0
Opekiska L&D.....	WV Monongahela..	Monongahela R..	N	0.0	857.0
835.0	0	0	RHA 1950.		
Paint Cr Lk.....	OH Ross,	Paint Cr.....	F	124.7	845.0
798.0	4,761	1,190	PL 75-761.		
Highland.					
798.0	787.5	1,190	770	FMCAR	11.4
Paintsville Lk.....	KY Johnson.....	Paint Cr.....	F	32.8	731.0
709.0	1,867	1,139	PL 89-298.		
709.0	650.0	1,139	261	FCAR	36.3
Patoka Lk.....	IN DuBois.....	Patoka R.....	F	121.1	548.0
536.0	11,300	8,880	PL 89-298.		
536.0	506.0	8,880	2,010	FMCAR	167.3
Piedmont Lk.....	OH Harrison.....	Stillwater Cr..	F	32.2	924.6
913.0	3,170	2,310	PW 1933.		
913.0	909.0	2,310	1,987	FCR	8.6
Pike Island L&D.....	WV Ohio.....	Ohio R.....	N	0.0	644.0
623.0	0	0	RHA 1909.		
OH Belmont.....					
Pleasant Hill Lk.....	OH Ashland.....	Clear Fk.....	F	74.2	1,065.0
1,020.0	2,600	850	PW 1933.		
1,020.0	1,012.5	850	627	FCR	5.5
R D Bailey Lk.....	WV Mingo,	Guyandot R.....	F	169.5	1,155.0
1,035.0	2,850	630	PL 87-874.		
Wyoming.					
				FCAR	12.2

1,035.0	1,012.0	630	440	.....				
Racine L&D.....					WV Mason.....	Ohio R.....	N	0.0 560.0
538.0	0	0	RHA	1909.				
					OH Meigs.....			
Rough River Lk.....					Grayson,	Rough R.....	F	214.4 524.0
495.0	10,260	5,100	PL	75-761.				
					Breckinridge.			
					Ridge.....		FMR	90.2 495.0
470.0	5,100	2,180						
Salamonie Lk.....					IN Wabash.....	Salamonie R....	F	202.9 793.0
755.0	9,340	2,860	PL	85-500.				
							FR	47.6
755.0	730.0	2,860		976				
Senecaville Lk.....					OH Guernsey.....	Seneca Fk.....	F	45.1 842.5
832.2	5,170	3,550	PW	1933.				
							FCR	12.8
832.2	828.2	3,550		2,912				
Shenango River Lk.....					PA Mercer.....	Shenango R.....	F	151.0 919.0
896.0	11,090	3,560	PL	75-761.				
							FCAR	29.9
896.0	885.0	3,560		1,910				
Smithland L&D.....					KY Livingston...	Ohio R.....	N	0.0 324.0
302.0	0	0	RHA	1909.				
					IL Pope.....			
Summersville Lk.....					WV Nicholas.....	Gauley R.....	F	221.9 1,710.0
1,1652.0	4,913	2,790	PL	75-761.				
							FRCA	161.8
1,652.0	1,535.0	2,790		514				
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Sutton Lk.....					WV Braxton.....	Elk R.....	FCAR	60.0 925.0
850.0	1,520	270	PL	75-761.				
Tappan Lk.....					OH Harrison.....	L Stillwater Cr	F	26.5 909.0
899.3	3,100	2,350	PW	1933.				
							FCR	11.4
899.3	894.0	2,350		1,960				
Tionesta Lk.....					PA Forest.....	Tionesta Cr....	F	125.6 1,170.0
1,085.0	2,770	480	PL	74-738. PL 75-761.				
Tom Jenkins Dam, Burr Oak, Lk					OH Athens.....	E Br Sandy Cr..	F	17.6 740.0
721.0	1,192	664	FCA	1944.				
							FRM	5.8
721.0	710.0	664		394	PL 78-534.			
Tygart Lake.....					WV Taylor.....	Tygart R.....	F	178.1 1,167.0
1,094.0	3,430	1,740	PWA	1934.				
							FMACR	99.9
1,094.0	1,010.0	1,740		620				
Union City Res.....					PA Erie.....	French Cr.....	F	47.6 1,278.0
1,210.0	2,290	0	PL	87-874.				
Uniontown L&D.....					KY Union.....	Ohio R.....	N	0.0 342.0
324.0	0	0	RHA	1909.				
					IN Posey.....			
W Fk of Mill Cr Winton Woods					OH Hamilton.....	W Fk Mill Cr...	F	9.8 702.0
675.0	557	183	PL	79-526.				
Lk.								
Willow Island L&D.....					WV Pleasants...	Ohio R.....	N	0.0 602.0
582.0	0	0	RHA	1909.				
					OH Washington...			
Wills Cr Lk.....					OH Coshockton		F	190.0 779.0
742.0	11,450	900	PW	1933.				
					Wills Cr,			
					Muskingum.		CR	0.0
0.0	0.0	0		0				
Winfield L&D.....					WV Putnam.....	Kanawha R.....	N	0.0 566.0
538.0	0	0	RHA	1935.				
Wolf Cr Dam, Lk Cumberland...					KY Russell.....	Cumberland R...	P	2,142.0 723.0
673.0	50,250	35,820						
							F	2,094.0
760.0	723.0	63,530		50,250	PL 75-761.			
Woodcock Cr Lk.....					PA Crawford.....	Woodcock Cr....	F	15.0 1,209.0
1,181.0	775	325	FCA	1962.				
							FCAR	5.0
1,181.0	1,162.5	325		100				
Youghiogheny R Lk.....					PA Fayette.....	Youghiogheny R.	F	99.5 1,470.0
1,439.0	3,570	2,840	FCA	1938.				

				FCAR	149.3	
1,439.0	1,419.0	2,840	2,300			
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South Atlantic Division						
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Aberdeen L&D and Res.....	MS Monroe.....	Tombigbee R....	N	3.9	190.5	
189.5 4,359 3,883 PL 79-525.						
Aliceville Lock Dam & Res....	AL Pickens.....	Tombigbee R....	N	7.6	136.5	
135.5 8,655 7,945 PL 79-525.						
Allatoona Dam & Res.....	GA Bartow.....	Etowah R.....	F	302.6	860.0	
840.0 19,201 11,862 PL 77-228.						
			PMAR	284.6		
840.0 800.0 11,862 3,251						
B Everett Jordan Dam & Lk....	NC Chatham.....	Haw R.....	F	538.4	240.0	
216.0 31,811 13,942 PL 88-253.						
			FMCAR	140.4		
216.0 202.0 13,942 6,658						
Bay Springs Lock Dam & Res....	MS Tishomingo...	Tombigbee R....	N	37.0	414.0	
408.0 6,700 5,740 PL 79-525.						
Buford Dam Lk, Sidney Lanier.	GA Forsyth,	Chattahoochee R	F	598.8	1,085.0	
1,071.0 47,182 38,542 PL 79-14.	Gwinnett.		PNMR	1,087.6	1,071.0	
1,035.0 38,542 22,442						
Carters Dam & Res.....	GA Murray.....	Coosawattee R..	F	89.2	1,099.0	
1,074.0 3,880 3,275 PL 79-14.						
			PRA	41.4		
1,074.0 1,022.0 3,275 2,196						
Claiborne Lock Dam & Res.....	AL Monroe.....	Alabama R.....	N	16.6	35.0	
32.0 5,930 5,210 PL 79-14.						
Clarks Hill Dam & Lk.....	GA Columbia.....	Savannah R....	F	390.0	335.0	
330.0 78,500 71,100 PL 78-534.	SC McCormick....		FP	1,045.0	330.0	
312.0 71,100 45,000						
Coffeeville Lock Dam & Res....	AL Clark,	Tombigbee R....	N	19.9	32.5	
30.0 8,500 7,500 PL 60-317.	Choctaw.					
Columbus Lock Dam & Res.....	MS Lowndes.....	Tombigbee R....	N	8.5	163.5	
162.5 9,400 8,500 PL 79-525.						
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Demopolis Lock Dam & Res.....	AL Sumter,	Tombigbee R....	N	0.0	73.0	
73.0 10,000 10,000 PL 60-317.	Marengo.					
Falls Dam & Lk.....	NC Wake.....	Neuse R.....	F	220.9	264.0	
250.1 20,810 11,310 PL 89-298.						
			FMCAR	89.7		
250.1 236.5 11,310 2,600						
G W Andrews L&D and Res.....	AL Houston.....	Chattahoochee R	N	8.2	102.0	
96.0 1,540 1,190 PL 79-14.	GA Early.....					
Gainesville L&D and Res.....	AL Sumter,	Tombigbee R....	N	5.8	109.5	
108.5 6,920 5,900 PL 79-525.	Greene.					
Hartwell Dam & Lk.....	GA Hart.....	Savannah R....	F	293.0	665.0	
660.0 61,400 55,950 PL 81-516.	SC Anderson.....		FP	1,416.0	660.0	
625.0 55,950 27,650						
Holt Lock Dam & Res.....	AL Tuscaloosa...	Black-Warrior R	NP	3.3	187.0	
186.0 3,296 3,252 PL 60-317.						
Inglis Dam Lk Rousseau.....	FL Levy, Marion,	Cross FL Barge	N	13.0	27.5	
24.0 4,030 2,040 PL 77-675.	Citrus.	Canal.				
Jim Woodruff L&D.....	FL Gadsden,	Apalachicola R.	NP	20.0	77.5	
76.5 38,850 36,000 PL 79-14.	Jackson.					
John H Kerr Dam & Res.....	VA Mecklenburg..	Roanoke R.....	F	1,281.4	320.0	
300.0 83,200 48,900 PL 78-534.						
			FP	1,027.0		
300.0 268.0 48,900 19,700						
John Hollis Bankhead L&D and	AL Tuscaloosa...	Black-Warrior R	NP	27.1	255.0	
252.0 9,245 8,730 PL 60-168.	Res.					
Lk Okeechobee.....	FL Okeechobee,	Central and	FNIMC	2,859.0	17.5	
10.5 454,900 326,000 PL 71-520, PL 75-392,	Glades, Hendry,	Southern FL.				

PL 79-14, PL 80-858,

Palm Beach,

PL 83-780, PL 90.

				Martin.					
Lock A.....			MS Monroe.....	Tombigbee R....	N	0.9	220.5		
219.5	980	850	PL 79-525.						
Lock B.....			MS Monroe.....	Tombigbee R....	N	2.7	245.5		
244.5	2,841	2,615	PL 79-525.						
Lock C.....			MS Itawamba.....	Tombigbee R....	N	1.6	270.5		
269.5	1,699	1,586	PL 79-525.						
Lock D.....			MS Itawamba.....	Tombigbee R....	N	2.0	300.5		
299.5	2,021	1,959	PL 79-525.						
Lock E.....			MS Itawamba,	Tombigbee R....	N	0.9	330.5		
329.5	889	821	PL 79-525.						
				Prentiss.					
Millers Ferry L&D.....			AL Wilcox.....	Alabama R.....	NP	16.7	80.0		
79.0	17,201	16,160	PL 79-14.						
Okatibbee Dam & Res.....			MS Lauderdale...	Okatibbee Cr...	F	46.5	352.0		
343.0	6,580	3,800	PL 87-874.						
				Chickasawbay R.	RMA	34.3			
343.0	328.0	3,800	1,275						
Philpott Dam & Lk.....			VA Henry.....	Smith R.....	F	34.2	985.0		
974.0	3,370	2,880	PL 78-534.						
					FP	111.2			
974.0	920.0	2,880	1,350						
R B Russell Dam and Lk.....			GA Elbert.....	Savannah R.....	F	140.0	480.0		
475.0	29,340	26,653	PL 89-789.						
			SC Abbeville....		FP	126.8	475.0		
470.0	26,653	24,117							
Robert F Henry Lock Dam & Res			AL Autauga,	Alabama R.....	NP	44.6	125.0		
124.0	13,300	10,470	PL 79-14.						
				Lowndes.					
Rodman Dam & Lk Ocklawaha....			FL Putman &	Cross FL Barge	N	48.0	23.2		
20.0	17,350	12,950	PL 77-675.						
				Marion.					
S-10 & Water Cons Area 1.....			FL Palm Beach...	Central and	F	181.9	18.3		
17.0	141,250	141,250	PL 80-858.						
				Southern FL.					
17.0	14.0	141,250	26,00		FIMC	273.2			
S-11 & Water Cons Area 2A....			FL Palm Beach	Central and	F	236.3			
16.6	14.5	110,500	110,500	PL 80-858.					
			Broward.	Southern FL.					
14.5	13.0	110,500	107,500	PL 83-780.	FIMC	165.0			
S-12 & Water Cons Area 3A....			FL Broward &	Central and	F	1,661.0	14.5		
10.5	487,200	385,000	PL 80-858.						
			Dade.	Southern FL.					
10.5	9.5	385,000	316,000	PL 83-780.	FIMC	465.0			
Selden Lock and Res.....			AL Hale, Greene.	Black-Warrior R	N	9.1	95.5		
94.0	8,200	6,900	PL 60-317.						
W Kerr Scott Dam & Res.....			NC Wilkes.....	Yadkin R.....	F	112.0	1,075.0		
1,030.0	4,000	1,475	PL 79-526.						
					FM	33.0			
1,030.0	1,000.0	1,475	675						
Walter F George L&D.....			GA Clay.....	Chattahoochee R	NP	244.0	190.0		
184.0	45,181	36,375	PL 81-516.						
			AL Henry.....						
West Point Dam & Res.....			GA Troup.....	Chattahoochee R	NPMAR	306.1	635.0		
620.0	25,864	15,512	PL 87-874.						
William Bacon Oliver L&D and			AL Tuscaloosa...	Black Warrior R	N	0	122.9		
122.9	790	790	PL 60-317.						
Res.									

South Pacific Division

Alamo Dam & Lk.....			AZ Mohave, Yuma.	Bill Williams R	F	1,046.2	1,235.0		
1,174.0	13,307	7,045	PL 78-534.						
Bear Dam.....			CA Mariposa.....	Bear Cr.....	F	7.7	413.5		
344.0	265	0	PL 78-534.						
Black Butte Lk.....			CA Tehama.....	Stony Cr.....	FI	137.1	473.5		
414.6	4,453	577	PL 78-534.						

Brea Dam & Res.	208.0	163	0	FCA	CA Orange.....	Brea Cr.....	F	4.0	279.0
Buchanan Dam H.V. Eastman Lk.	559.0	1,785	1,482	PL	CA Madera.....	Chowchilla R...	F	45.0	587.0
					78-874.		FI	140.0	
Burns Dam.....	587.0	466.0	1,785		484 .....	Burns Cr.....	F	6.8	300.0
Carbon Canyon Dam & Res.....	266.0	662	0	PL	CA Merced.....	Carbon Cr.....	F	6.6	475.0
Coyote Valley Dam Lk	403.0	225	0	PL	CA Orange.....	East Fork,	F	50.1	764.8
Mendocino.	737.5	1,922	1,740	PL	74-738.	Russian R.	IM	72.3	
Dry Cr (Warm Springs) Lk & Channel.	737.5	637.0	1,740		20 .....	Dry Cr.....	F	136.0	495.0
	451.1	3,600	2,600	PL	CA Sonoma.....		MR	225.0	
Farmington Dam.....	451.1	291.0	2,600		500 .....	Littlejohn Cr..	F	52.0	156.5
Fullerton Dam & Res.....	120.0	4,107	0	PL	CA San Joaquin,	Stanislaus.	F	0.8	290.0
Hansen Dam Res.....	261.0	62	0	FCA	CA Orange.....	Tujunga Wash...	F	25.4	1,060.0
Hidden Dam Hensley Lk.....	990.0	781	0	FCA	CA Los Angeles..	Fresno R.....	F	65.0	540.0
Isabella Lk.....	485.8	1,567	811	PL	CA Madera.....		FI	85.0	
Lopez Dam Res.....	540.0	448.0	1,567		280 .....	Kern R.....	FI	568.1	2,605.5
Mariposa Dam.....	2,470.0	11,454	26	PL	CA Kern.....	Pocoima Wash...	F	0.4	1,272.9
Martis Cr Lk.....	1,253.7	40	0	FCA	CA Los Angeles..	Mariposa Cr....	F	15.0	439.5
Mathews Canyon Dam & Res.....	370.0	512	0	PL	CA Mariposa.....	Martis Cr.....	F	19.6	5,838.0
Mojave River Dam & Res.....	5,780.0	762	61	PL	CA Nevada.....	Mathews Canyon.	F	6.3	5,461.0
New Hogan Lk.....	5,420.0	300	0	PL	NV Lincoln.....	Mojave R.....	F	89.7	3,134.0
Owens Dam.....	2,988.0	1,978	0	PL	CA San Bernardino.	Calaveras R....	F	165.0	713.0
Painted Roc Dam & Res.....	666.2	4,333	2,818	PL	CA Calaveras....		FI	302.2	
Pine Canyon Dam & Res.....	713.0	586.0	4,333		702 .....	Owens Cr.....	F	3.6	407.5
Pine Flat Lk Kings R.....	347.0	174	0	PL	CA Mariposa.....	Gila R.....	F	2,491.5	661.0
Prado Dam & Res.....	524.0	53,200	0	PL	AZ Maricopa.....	Pine Canyon....	F	7.8	5,675.0
San Antonio Dam & Res.....	5,604.0	254	0	PL	NV Lincoln.....	Kings R.....	F	1,000.0	951.5
Santa Fe Dam & Res.....	565.5	5,956	0	PL	CA Fresno.....	Santa Ana R....	F	196.2	543.0
Sepolveda Dam & Res.....	460.0	6,630	0	FCA	CA Riverside....	San Antonio Cr.	F	7.7	2,238.0
Success Lk.....	2,125.0	145	0	FCA	CA Los Angeles..	San Gabriel R..	F	32.1	496.0
Terminus Dam Lk Kaweah.....	421.0	1,084	0	FCA	CA Los Angeles..	Los Angeles R..	F	17.4	710.0
Whittlow Ranch Dam & Res.....	668.0	1,335	0	FCA	CA Los Angeles..	Tule R.....	FI	75.0	652.5
Whittler Marrows Dam & Res...	588.9	2,477	409	PL	CA Tulare.....	Kaweah R.....	FI	136.1	694.0
	570.0	1,913	276	PL	78-534.	Queen Cr.....	F	35.6	2,166.0
	2,056.0	828	0	PL	AZ Pinal.....	San Gabriel Rio	F	34.9	228.5
	184.0	2,411	0	FCA	79-526.	Hondo R.			
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Southwestern Division									
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Abiquiu Dam.....	6,220.0	7,469	4,120	PL	NM Rio Arriba...	Rio Chama.....	F	572.2	6,283.5
					80-858.				

6,220.0	6,060.0	4,120	0	FM	191.3	
Addicks Res.....			TX Harris.....	Buffalo Bayou..	F	200.8 112.0
71.1	16,423	0	HD250-83-2.			
Aquilla Lk.....			TX Hill.....	Aquilla Cr.....	F	161.4 564.5
537.5	8,980	3,280	PL 90-483.			
537.5	478.6	3,280	26	MR	93.6	
[[Page 253]]						
Arcadia Lk.....			OK Oklahoma.....	Deep Fork R....	F	64.4 1,029.5
1,006.0	3,820	1,820	PL 91-611.			
1,006.0	970.0	1,820	20	FMCR	27.4	
B A Steinhagen Lk.....			TX Taylor,	Neches R.....	F	24.5 83.0
81.0	13,700	10,950	SD98-76-1.			
			Jasper.			
Bardwell Lk.....			TX Ellis.....	Waxahachie Cr..	F	79.6 439.0
421.0	6,040	3,570	PL 86-399.			
421.0	372.6	3,570	0	M	42.8	
Barker Res.....			TX Harris Ft	Buffalo Bayou..	F	209.0 106.0
73.2	16,734	0	HD250-83-2, RHA 1938.			
			Bend.			
Beaver Lk.....			AR Carrol,	White R.....	F	299.6 1,130.0
1,120.0	31,700	28,220	PL 83-780.			
			Benton,			
			Washington.			
1,120.0	1,077.0	28,220	15,540 PL 85-500.	FPM	925.1	
Belton Lk.....			TX Bell.....	Leon R.....	F	640.0 631.0
594.0	23,600	12,400	PL 79-526.			
594.0	470.0	12,400	42 HD88-81-1.	MI	372.7	
Benbrook Lk.....			TX Tarrant,	Clear Fk	F	170.4 724.0
694.0	7,630	3,770	HD103-771.			
			Parker.	Trinity R.		
694.0	656.0	3,770	730	NM	72.5	
Big Hill LK.....			KN Labette.....	Big Hill Cr....	F	13.1 867.5
858.0	1,520	1,240	PL 87-874.			
858.0	814.0	1,240	70 HD572-87-2.	FMR	27.2	
Birch Lk.....			OK Osage.....	Birch Cr.....	F	39.0 774.0
750.5	2,340	1,140	PL 87-874.			
750.5	730.0	1,140	384 HD563-87-2.	FMCAR	15.8	
Blue Mountain Lk.....			AR Yell, Logan..	Petit Jean R...	F	233.3 419.0
384.0	11,000	2,910	PA 75-761.			
Broken Bow Lk.....			OK McCurtain....	Mountain Fk R..	F	450.2 627.5
599.5	18,000	14,200	PL 85-500.			
599.5	559.5	14,200	9,200	FRPMAC	469.8	
Bull Shoals Lk.....			AR Baxter,	White R.....	F	2,360.0 695.0
654.0	71,240	45,440	PL 77-228.			
			Marion, Boone.			
628.5	45,440	33,800	MO Ozark, Taney.	PF	1,003.0 654.0	
Canton Lk.....			OK Blain.....	N Canadian R...	F	265.8 1,638.0
1,615.4	15,710	7,910	PL 75-761.			
1,615.4	1,596.5	7,910	2,710 HD56-/75-3.	FMI	97.2	
Canyon Lk.....			TX Comal.....	Guadalupe R....	F	346.4 934.0
909.0	12,890	8,240	PL 79-14.			
909.0	75.0	8,240	0	M	366.4	
Clearwater Lk.....			MO Reynolds,	Black R.....	F	391.8 567.0
494.0	10,400	1,630	PL 75-761.			
			Wayne.			
Cochiti Lk.....			NM Sandoval,	Rio Grande.....	F	545.0 5,460.5
5,356.6	9,361	1,200	PL 86-645.			
			Sante Fe, Los			
			Alamos.	FRC	43.0	
5,356.6	5,330.0	1,200	0			
Conchas Lk.....			NM San Miguel...	Candian R.....	F	198.8 4,218.0
4,201.0	13,664	9,692	HD 308-74.			
4,201.0	4,155.0	9,692	3,000	FI	259.6	

Copan Lk.....	OK Washington...	L Caney R.....	F	184.3	732.0
710.0	13,380	4,850	PL 87-874.		
			KS Chautauqua...	42.8	710.0
687.5	4,850	110	HD563-87-2.		
Council Grove Lk.....	KS Morris.....	Neosho R.....	F	63.8	1,289.0
1,274.0	5,400	3,230	PL 81-516.		
			FMAR	48.5	
1,274.0	1,240.0	3,230	42 .....		
DeQueen Lk.....	AR Sevier.....	Rolling Fork R.	F	101.3	473.5
437.0	4,050	1,680	PL 85-500.		
			FMCRCQ	25.5	
437.0	415.0	1,680	710 .....		
Dierks Lk.....	AR Sevier,	Saline R.....	F	67.1	557.5
526.0	2,970	1,360	PL 85-500.		
			Howard.		
			FMCRCR	15.1	
526.0	512.0	1,360	810 .....		
Eldorado Lk.....	KS Butler.....	Walnut R.....	F	79.2	1,347.5
1,339.0	10,740	8,000	PL 89-298.		
			FMAR	154.0	
1,339.0	1,296.0	8,000	420 HD232-89-1.		
Elk City Lk.....	KS Montgomery...	Elk R.....	F	239.5	825.0
796.0	13,150	4,450	HD440-76-1.		
			FMA	44.8	
796.0	764.0	4,450	64 .....		
Eufaula Lk.....	OK McIntosh,	Candian R.....	F	1,510.9	597.0
585.0	147,960	105,480	PL 79-525.		
			Pittsburg,		
			Haskell.		
			FNPM	1,463.0	
585.0	565.0	105,480	46,120 .....		
Fall River Lk.....	KS Greenwood....	Fall R.....	F	234.5	987.5
948.5	10,400	2,350	HD440-76-1.		
			FA	15.0	
948.5	940.0	2,350	1,170 .....		
[[Page 254]]					
Fort Gibson Lk.....	OK Wagoner.....	Neosho (Grand)	F	919.2	582.0
554.0	51,000	19,900	FEC 1941.		
			R.		
			FP	53.9	
554.0	551.0	19,100	16,950 RHA 1946.		
Fort Supply Lk.....	OK Woodward.....	Wolf Cr.....	F	86.8	2,028.0
2,004.0	5,690	1,820	PL 74-738.		
			FM	13.9	
2,004.0	1,988.0	1,820	0 .....		
Galisteo Dam.....	NM Santa Fe.....	Galisteo Cr....	F	79.4	5,608.0
5,496.0	2,060	0	PL 86-645.		
Georgetown Lk.....	TX Williamson...	N.F. San	F	87.6	834.0
791.0	3,220	1,310	PL 87-874.		
			Gabriel R.		
			MC	29.2	
791.0	699.0	1,310	0 HD 591-82-2.		
Gillham Lk.....	AR Howard, Polk.	Cossatot R.....	F	188.7	569.0
502.0	4,680	1,370	PL 85-500.		
			FMCRCQ	29.3	
502.0	464.5	1,370	310 .....		
Granger Lk.....	TX Williamson...	San Gabriel R..	F	162.2	528.0
504.0	11,040	4,400	PL 87-874.		
			M	37.9	
504.0	440.0	4,400	0 .....		
Grapevine Lk.....	TX Denton,	Denton Cr.....	F	243.1	560.0
535.0	12,710	7,280	HD103-77-1.		
			Tarrant.		
			M	154.3	
535.0	451.0	7,380	41 .....		
Great Salt Plains Lk.....	OK Alfalfa.....	Salt Fk.....	F	240.0	1,138.5
1,125.0	27,730	8,693	PL 74-738.		
			Arkansas R.....	31.4	1,125.0
1,115.0	8,690	0	.....		
Greers Ferry Lk.....	AR Cleburne, Van	Little Red R...	F	934.0	487.0
461.0	40,480	31,460	PL 75-761.		
			Buren.		
			FP	716.5	
461.0	435.0	31,460	23,740 PL 83-780.		
Heyburn Lk.....	OK Creek.....	Polecat Cr.....	F	48.4	784.0
761.5	3,700	917	PL 79-526.		
			FM	3.8	
761.5	55.5	917	394 .....		

Hords Cr Lk.....	TX Coleman.....	Hords Cr.....	F	16.7	1,920.0
1,900.0	1,260	510 PL 77-228.			
			M	5.8	
1,900.0	1,848.0	510 0 .....			
Hugo Lk.....	OK Choctaw.....	Kiamichi R.....	F	809.1	437.5
404.5	34,490	13,250 PL 79-526.			
			FMCAR	127.2	
404.5	390.0	13,250 4,500 .....			
Hulah Lk.....	OK Osage.....	Caney R.....	F	257.9	765.0
733.0	13,000	3,570 PL 74-738.			
		KS Chautaugua...	FMA	31.1	733.0
710.0	3,570	0 PL 84-843.			
Jemez Canyon Dam.....	NM Sandoval.....	Jemez R.....	F	73.0	5,232.0
5,196.1	2,877	1,370 PL 80-858			
PL 81-516.					
Joe Pool Lk.....	TX Dalla, Ellis, Tarrant.	Mountain Cr....	F	1,238.0	536.0
522.0	10,940	7,470 PL 89-298.			
			M	176.9	
522.0	456.0	7,470 10 .....			
John Martin Res.....	CO Bent.....	Arkansas R.....	F	270.3	3,870.0
3,851.0	17,630	11,655 PL 74-738.			
			FRC	350.9	
3,851.0	0.0	11,655 0 .....			
John Redmond Dam & Res.....	KS Coffee.....	Neosho R.....	F	559.0	1,068.0
1,039.0	31,700	9,300 PL 81-516.			
			FMAR	70.8	
1,039.0	1,020.0	9,300 108 .....			
Kaw Lk.....	OK Kay, Osage...	Arkansas R.....	F	919.4	1,044.5
1,010.0	38,020	17,040 PL 87-874.			
		KS Cowley.....	FMARC	343.5	1,010.0
978.0	17,040	5,590 .....			
Keystone Lk.....	OK Tulsa.....	Arkansas R.....	F	1,180.0	754.0
723.0	54,300	23,600 PL 81-516.			
			FNPMC	296.7	
723.0	706.0	23,600 13,300 .....			
L&D 01, Norrell.....	AR Arkansas.....	Arkansas Post	N	0.0	142.0
142.0	140	140 HD 758-79, RHA 1946.			
		Canal.			
L&D 02, Wilbur D. Mills Dam..	AR Desha, Arkansas.	Arkansas R.....	N	18.7	162.3
160.5	10,700	9,400 HD 758-79, RHA 1946.			
L&D 03.....	AR Jefferson, Lincoln.	Arkansas R.....	N	8.3	182.3
180.0	3,750	3,180 HD 758-79, RHA 1946.			
L&D 04.....	AR Jefferson....	Arkansas R.....	N	12.9	196.3
194.0	5,820	5,200 HD 758-79, RHA 1946.			
L&D 05.....	AR Jefferson....	Arkansas R.....	N	14.4	213.3
211.0	6,900	5,550 HD 758-79, RHA 1946.			
L&D 06, David D. Terry.....	AR Pulaski.....	Arkansas R.....	N	9.6	231.3
229.0	4,830	4,130 HD 758-79.			
L&D 07, Murray.....	AR Pulaski.....	Arkansas R.....	N	24.7	249.7
247.0	10,350	8,100 RHA 1946.			
[[Page 255]]					
L&D 08, Toad Suck Ferry.....	AR Faulkner, Perry.	Arkansas R.....	N	8.7	265.3
263.0	4,130	3,600 RHA 1946.			
L&D 09, Arthur V. Ormond L&D,	AR Conway.....	Arkansas R.....	N	15.8	287.0
284.0	5,660	4,910 HD 758-79.			
W. Rockefeller Lk.					
L&D 10, Lk Dardanelle.....	AR Pope Yell....	Arkansas R.....	NP	72.3	338.2
336.0	34,700	31,140 HD 758-79, RHA 1946.			
L&D 11, Ozark-Jetta Taylor...	AR Franklin.....	Arkansas.....	NPR	25.3	372.5
370.0	11,100	8,800 RHA 1946, HD 758-79.			
L&D 13, James W. Trimble....	AR Sebastian,	Arkansas R.....	N	18.1	392.0
389.0	6,820	5,200 RHA 1946.			
		Crawford.			
L&D 14, W. D. Mayo.....	OK Sequoyah,	Arkansas R.....	N	0.0	413.0
0.0	1,600	0 PL 79-525.			
		Leflore.			
L&D 15, Robert S. Kerr Res...	OK Leflore,	Arkansas R.....	NP	84.7	460.0
458.0	43,800	40,760 PL 79-525.			
		Sequoyah.			
L&D 16, Webbers Falls Res....	OK Muskogee.....	Arkansas R.....	NP	32.4	490.0
487.0	10,900	9,300 PL 79-525.			
L&D 17, Chouteau.....	OK Waggoner.....	Verdigris R....	N	0.0	511.0
511.0	2,270	2,270 PL 79-525, HD 758-79-2.			

L&D 18, Newt Graham.....	OK Wagoner.....	Verdigris R....	N	0.0	532.0
532.0 1,490 1,490 PL 97-525.					
Lake O' The Pines.....	TX Marion.....	Cypress Cr....	F	579.5	249.5
228.5 38,200 18,700 PL 79-526.					
			M	250.0	
228.5 201.0 18,700 1,100 .....					
Lavon Lk.....	TX Collin.....	East Fork,	F	275.6	503.5
492.0 29,450 21,400 HD 533-78-2.					
		Trinity R.	M	380.0	
492.0 433.0 21,400 2,87 .....					
Lewisville Lk Garza-Little	TX Denton.....	Elm Fork	F	525.2	532.0
515.0 39,080 23,280 HD 403-77-1.					
Elm Dam.		Trinity R.	M	436.0	
515.0 433.0 23,280 12 .....					
Marion Lk.....	KS Marion.....	Cottonwood R...	F	60.2	1,358.5
1,350.5 9,050 6,200 PL 81-516.					
			FMAR	83.3	
1,350.5 1,320.0 6,200 170 .....					
Millwood Lk.....	AR Little R	Little R.....	F	1,650.0	287.0
259.2 95,200 29,200 PL 79-526.					
		Hempstead.			
			FMC	153.3	
259.2 252.0 29,200 13,100 HD 785-79.					
Navarro Mills Lk.....	TX Navarro Hill.	Richland Cr....	F	143.2	443.0
424.5 11,700 5,070 HD 498-83-2.					
			M	53.2	
424.5 375.3 5,070 0 .....					
Nimrod Lk.....	AR Perry, Yell..	Fourche La Fave	F	307.0	373.0
342.0 18,300 3,550 FCA 1938.					
		R.			
Norfork Lk.....	AR Baxter,	North Fork R...	F	731.8	580.0
552.0 30,700 21,990 PL 75-761.					
		Fulton.			
		MO Ozark.....	FP	707.0	552.0
510.0 21,990 12,320 FCA 1941					
North Fork Lk.....	TX Williamson...	N.F. San	F	87.6	834.0
791.0 3,220 1,310 PL 87-874.					
		Gabriel R.			
			MC	29.2	
791.0 699.0 1,310 0 HD 591-82-2.					
O. C. Fisher Lk.....	TX Tom Green....	N. Concho R....	F	277.2	1,938.5
1,908.0 12,700 5,440 PL 77-228.					
			M	80.4	
1,908.0 1,836.0 5,440 3 .....					
Oologah Lk.....	OK Rogers.....	Verdigris R....	F	965.6	661.0
638.0 56,800 29,460 PL 75-761.					
			FMN	544.1	
638.0 592.0 29,460 1,120 .....					
Optima Lk.....	OK Texas.....	N. Candian R...	F	100.5	2,779.0
2,763.5 7,640 5,340 PL 74-738.					
			FMRC	117.7	
2,763.5 2,726.0 5,340 1,335 .....					
Pat Mayse Lk.....	TX Lamar.....	Sanders Cr.....	F	64.6	460.5
451.0 7,680 5,993 PL 87-874.					
			FMCR	119.9	
451.0 415.0 5,993 996 HD 88-71.					
Pine Cr.....	OK McCurtain....	Little R.....	F	388.1	480.0
443.5 17,230 4,980 PL 85-500.					
			FMAC	77.6	
443.5 414.0 4,980 700 HD 170-85-1.					
Proctor Lk.....	TX Comanche.....	Leon R.....	F	310.1	1,197.0
1,162.0 14,010 4,610 PL 83-780, HD 535-81-2.					
Sam Rayburn Res.....	TX Jasper, San	Angelina R.....	F	1,099.4	173.0
164.4 142,700 114,500 HD 981-76-1.					
		Augustine,			
		Angelina.			
			PMC	1,446.2	
164.4 149.0 114,500 74,040 .....					
Santa Rosa.....	NM Guadalupe....	Pecos R.....	F	340.0	4,746.2
4,776.5 10,740 3,823 PL 83-780.					
			FI	160.0	
4,776.5 4,746.2 7,115 3,823 .....					
Sardis.....	OK Pushmatah....	Jackfork Cr....	F	122.6	607.0
599.0 16,960 13,610 HD 602-79-2.					
			FMR	274.2	
599.0 542.0 13,610 40 .....					
Somerville Lk.....	TX Washington,	Yegua Cr.....	F	337.7	258.0
238.0 24,400 11,460 PL 83-780.					
		Lee, Burleson.			

238.0	200.0	11,460	0	.....	M	143.9	
Stiatook.....			OK Osage.....	Hominy Cr.....	F	178.0	729.0
714.0	13,690	10,190	HD 563-87.				
714.0	657.0	10,190	1,430	.....	FMARC	311.6	
Stillhouse H. Lk.....			TX Bell.....	Lampasas R.....	F	390.6	666.0
622.0	11,830	6,430	PL 83-780.				
622.0	498.0	6,430	0	.....	M	204.9	
Table Rock Lk.....			MO Taney, Stone, White R.....		F	760.0	931.0
915.0	52,250	43,070	PL 77-228.				
915.0	881.0	43,070	27,300	FCA 1938.	FP	1,181.50	
Tenkiller Ferry Lk.....			OK Cherokee, Illinois R.....		F	576.7	667.0
632.0	20,800	12,900	RHA 1946.				
632.0	594.5	12,900	7,370	.....	FP	371.0	
Texoma Lk, Denison Dam.....			TX Marshall.....	Red R.....	F	2,669.0	640.0
617.0	144,000	88,000	PL 75-761.				
590.0	88,000	41,000	OK Bryan, Cook, Grayson.		FPM	1,612.0	617.0
Toronto Lk.....			KS Woodson.....	Verdigris R....	F	179.8	931.0
901.5	11,740	2,660	HD 440-76-1.				
901.5	896.7	2,660	1,720	.....	FMA	10.7	
Trinidad Lk.....			CO Las Animas...	Purgatorie R...	F	58.0	6,260.0
6,230.0	2,107	1,453	PL 85-500.				
6,230.0	0.0	1,453	0	.....	FI	20.0	
Two Rivers Dam.....			NM Chaves.....	Rio Hondo R....	F	150.0	4,032.0
3,945.0	4,806	0	PL 83-780.				
Waco Lk.....			TX Mclennan.....	Bosque R.....	F	3.3	500.0
455.0	19,440	7,270	PL 83-780.				
455.0	370.0	7,240	0	HD 535-81-2.	M	100.8	
Waurika Lk.....			OK Jefferson....	Beaver Cr.....	F	140.4	962.5
951.4	15,000	10,100	PL 88-253.				
951.4	910.0	10,100	830	.....	FMCAR	199.7	
Whitney Lk.....			TX Hill, Bosquel	Brazos R.....	F	1,372.0	571.0
533.0	49,820	23,560	PL 77-228.				
533.0	425.0	23,560	475	HD 390-76-1.	PM	381.9	
Wister Lk.....			OK Leflore.....	Pouteau R.....	F	387.0	502.5
474.6	23,070	5,000	PL 75-761.				
Wright Patman Lk.....			TX Bowie, Cass..	Sulphur R.....	F	2,363.7	259.5
220.0	119,700	20,300	PL 79-526.				
220.0	180.0	20,300	0	.....	FM	142.7	

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 \1\ Res--Reservoir; Lk--Lake; Div--Diversion: R--River; Cr--Creek; Fk--Fork; L&D--Lock & Dam;  
 GIWW--Gulf Intercoastal Waterway; FG--Floodgate; CS--  
 Control Structure; DS--Drainage Structure; PS--Pump Station.  
 \2\ F--Flood Control; N--Navigation; P--Hydropower; I--Irrigation; M--Municipal and/or Industrial  
 Water/Supply; C--Fish and Wildlife Conservation; R--  
 Recreation; A--Low Flow Augmentation or Pollution Abatement; Q--Quality or Silt Control.  
 \3\ PL--Public Law; HD--House Document; RHA--River & Harbor Act; PW--Public Works: FCA--Flood  
 Control Act; WSA--Water Supply Act.

[47 FR 44544, Oct. 8, 1982, as amended at 52 FR 15804, Apr. 30, 1987; 52  
 FR 23816, June 25, 1987; 57 FR 35757, Aug. 11, 1992. Redesignated at 60  
 FR 19851, Apr. 21, 1995]