

Reclamation Manual

Directives and Standards

Subject:	Developing Additional Project Benefits in Conjunction with a Safety of Dams Modification Project
Purpose:	This Directive and Standard (D&S) establishes general requirements for identifying, reviewing, approving, and developing additional project benefits and clarifies the process is consistent with Bureau of Reclamation (Reclamation) law. The value of this D&S is to define a process for developing additional project benefits by a non-Federal entity ¹ in conjunction with safety of dams (SOD) modifications while assuring the timely reduction of dam safety risks and protecting existing project benefits.
Authority:	The Reclamation Act of 1902 (Act of June 17, 1902, ch. 1093, 32 Stat. 388); Sundry Civil Expenses Appropriation Act for 1922 (Act of March 4, 1921, 41 Stat. 1404, 43 U.S.C. §395); and the Reclamation Safety of Dams Act of 1978, Public Law 95-578, 95th Cong. (92 Stat. 2471), as amended (43 U.S.C. § 506 , <i>et seq.</i>) (the SOD Act).
Approving Official:	Director, Dam Safety and Infrastructure
Contact:	Dam Safety Office (86-67100); Reclamation Law Administration Division (84-55000)

1. **Introduction.** The SOD Act has been amended to include authority for Reclamation to develop additional project benefits in conjunction with a SOD modification project. This D&S establishes requirements for developing and coordinating additional project benefits.
2. **Applicability.** This D&S applies to all Reclamation personnel identifying, reviewing, approving, and developing additional project benefits in conjunction with a SOD modification project. Coupling any other law or program with the Dam Safety Program's authority for construction under a joint project for additional benefit purposes does not diminish the requirements outlined in this D&S.
3. **Use of the Term Feasibility.** The term "feasibility" as used throughout this document applies only to the feasibility of additional project benefits under this D&S. Reclamation Manual (RM) D&S, *Water and Related Resources Feasibility Studies* ([CMP 09-02](#)), describes Reclamation's responsibilities concerning traditional water resources feasibility studies for the purpose of recommending Congressional authorization and applies to the formulation process used to develop and evaluate risk reduction alternatives under the

¹ The Office of the Solicitor has determined that it is permissible to interpret the law to allow Reclamation to spend appropriations on additional benefits which does not necessarily require a non-Federal partner. However, this D&S is specific to partnering with a non-Federal entity.

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Reclamation Dam Safety Program. In addition FAC 06-03, *Safety of Dams Modification Reports for Submission to the Congress* describes the requirements for a SOD Modification Report.

4. **Initial Approval to Evaluate Development of Additional Project Benefits with a SOD Modification Action.** Pursuant to Section 5.B. of the SOD Act, Reclamation must determine that additional project benefits are necessary and in the interest of the United States (U.S.) and the SOD modification project. This must be done prior to commencing the determination of feasibility of any additional project benefits. The Commissioner will determine the level of analysis required for this initial approval, which may be based on the funding capabilities of non-Federal partners, schedule, and what constitutes “necessary,” including consideration of current and future water demands.
 - A. **Recommendation.** As part of the initial approval process, the Director, Dam Safety and Infrastructure, (Director) will confirm that the additional project benefits are consistent with the SOD Act, necessary, and in the interest of the U.S. and the SOD modification project, prepare a recommendation for the Commissioner’s approval, coordinate the development of additional project benefits with the appropriate offices, assess the significance of efficiencies that can be achieved by integrating additional project benefits with a SOD modification project, and ensure development of additional project benefits will not negatively impact a SOD modification project.
 - B. **Coordination.** In coordination with the Director, the Regional Director (RD) may also seek a recommendation for the development of additional project benefits in response to a request from a potential non-Federal partner who has identified a potential need for additional project benefits. The RD will negotiate and execute the necessary agreements within the parameters set by this D&S and the approval memorandum applicable to each agreement. The initial approval process does not substitute for the required feasibility analysis (described in Paragraph 6) on which final determinations will be based.
 - C. **Consistency with the SOD Act.** The RD will coordinate with Dam Safety and Infrastructure and all necessary offices within the region to determine if the proposed development of the additional project benefits is consistent with the purposes of the SOD Act and complies with all requirements for such development.
 - D. **No Adverse Impacts.** The RD will coordinate with the Director to determine whether developing additional project benefits will result in an adverse impact to the timely implementation of appropriate public safety risk reduction activities. If developing the additional project benefits will cause an adverse impact, the Director will recommend to the RD that development of the additional project benefits not proceed in conjunction with the SOD modification project. The RD may terminate developing additional project benefits at any time based on safety concerns, detrimental impacts to

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the SOD modification project, unsatisfactory environmental impacts, or any other legitimate reason as determined by the RD.

5. Contract Requirements.

- A. **Contributed Funds Agreements.** Once the Commissioner has issued the initial approval, and it has been determined that the non-Federal partner will seek additional services from Reclamation, a contributed funds agreement (CFA) (see Appendix A) will be entered pursuant to the Sundry Civil Appropriations Act for 1922 of March 4, 1921, also known as the Contributed Funds Act, between Reclamation and each non-Federal partner prior to any work to be performed by Reclamation and paid for by the non-Federal partner.² This work includes confirming that additional project benefits are necessary and in the interest of the U.S. and the SOD modification project, and that the additional benefits project proposed by the non-Federal partner is feasible. Any additional benefits not specifically mentioned in the CFA are considered incidental and will not have costs allocated to them.
- (1) **Scope of Work.** The CFA and/or accompanying task orders will clearly outline the scope of work (SOW) performed using the advanced funds. The scope will include funds to update the Standing Operating Procedures, Designer's Operating Criteria, Operation and Maintenance Manual, and Emergency Action Plans to include new features. The SOW may also need to include potential tasks to be performed where cost sharing may occur in order to avoid delays in schedule and misinterpretation of potential cost sharing activities.
 - (2) **Design and Construction of Additional Benefits.** The design of the additional project benefits will meet Reclamation's design standards. Construction will meet the requirements in RM D&S, *Construction Activities* ([FAC 03-02](#)). The RD will oversee the construction necessary to develop the additional project benefits alternative as well as construction close out and will coordinate with any transferred works operating entity that will bear an increased responsibility because of the additional project benefits.
 - (3) **Cost Estimate.** The CFA and/or accompanying task orders (see Appendix B for example) will identify Reclamation's estimate of the costs for the current scope of work to the non-Federal partner.³ Reclamation shall set up a new work

²Because the CFA requires full prepayment of the anticipated costs of studying and developing the additional project benefits and will not include repayment of a non-Federal partner's obligation, the reserved authority of the Assistant Secretary of Water and Science to enter contracts with a repayment obligation in excess of \$50,000,000, as stated in Departmental Manual 255 DM 1.2.F., does not apply.

³May require several phases; cost estimates for all tasks are not required to be submitted all at once.

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breakdown structure⁴ to remain active and open to keep track of all Reclamation costs related to the additional project benefits' scope of work separate from the SOD modification project.

- (4) **Sufficient Advance Funds.** The CFA and/or accompanying task orders will require the non-Federal partner to provide sufficient funds to cover the estimated shared costs for the scope of work, design, and construction as well as all necessary additional benefits project operation, maintenance, and replacement (OM&R) costs. These costs include: all work related to the National Environmental Policy Act of 1969 (Public Law 91-190, 83 Stat. 852, 42 U.S.C. §4321 et seq.) (NEPA), the National Historic Preservation Act of 1966 (16 U.S.C. ch. 1A, subch. II § 470 et seq., 80 Stat. 915), and the Endangered Species Act of 1973 (16 U.S.C. ch. 35 § 1531 et seq., 87 Stat. 884) including all permitting and mitigation costs; development of all necessary studies, analyses, designs, plans, specifications, related material, and actual construction; and any related administrative costs.
- (a) **Required Advance Funds Subject to Cost Allocation.** The advance funds required by and established in the CFA and/or accompanying task orders are based on an estimate of costs and are subject to a final allocation of the actual costs of developing the additional project benefits. Any additional benefits not mentioned in the CFA and/or accompanying task orders are strictly incidental to that purpose and are not included in the allocation of costs.
- (b) **Additional Advances for Cost Increases.** The CFA and/or accompanying task orders will require Reclamation to negotiate any increase in funding requirements beyond the originally agreed upon amount with the non-Federal partner before Reclamation incurs those costs.
- (5) **Define Potential Cost Share Activities.** The CFA and/or accompanying task orders should identify any potential items that may be shared between the non-Federal partners and Reclamation, the level or percentage of the cost share, and any adjustments that will need to be accounted for at the additional benefits project completion. Cost share activities are limited to costs for activities that the Dam Safety Office (DSO) would normally have performed, and do not include

⁴ Contact the regional finance office to determine required work breakdown structure(s) and possible capitalization as well as the financial reporting requirements for activities performed by the non-Federal partners.

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activities/studies solely because they benefit the SOD modification project in some way.⁵

- (6) **Early Termination.** If the additional benefits project is terminated before completion, the additional benefits work as well as the cost share work will cease on the date the additional benefits project is terminated. The contract will recognize Reclamation's right to terminate the additional benefits project outlined in Paragraph 4.D. above.
- (7) **Unused Funds.** The CFA will return any unused funds to the non-Federal partner without interest, whether these funds are not needed to complete the scope of work or Reclamation determines at any point not to proceed.
- (8) **No Reimbursement for Expenditures.** The CFA will stipulate that no reimbursement will be provided by Reclamation to the non-Federal partner for expenditures required to complete the scope of work, regardless of outcome.
- (9) **Term of Contributed Funds Agreement.** The CFA will identify a term for which it will be in effect. The CFA will also provide for its termination upon mutual agreement by the parties.
- (10) **Standard Articles.** The CFA will contain the full list of standard contract articles required under Paragraph 4.B. of RM Policy *Reclamation Standard Water-Related Contract Articles* ([PEC P10](#)).
- (11) **Additional Requirements for Contributed Funds Agreements Addressing Advance Funding for Physical Development of Additional Project Benefits.** The CFA, which covers the physical development of the additional project benefits, will include the general requirements above and the following provisions:
 - (a) **Allocation of Costs for Additional Project Benefits.** Pursuant to Section 5.B. of the SOD Act, all costs associated with developing the additional project benefits will be allocated exclusively to the non-Federal partners (RM D&S, *Project Cost Allocations* ([PEC 01-02](#)), RM Policy, *Allocation of Operation, Maintenance, and Replacement Costs* (PEC P07)). The allocation of costs will include a cost savings allocated to both the Federal government and the non-Federal partner from jointly pursuing the project. See Appendix C for example.

⁵Certain activities may be exempt from repayment under a typical SOD modification project but may still fall under a cost share agreement for an additional benefits project. See [PEC 05-05](#), *Safety of Dams Repayment and Cost Allocation*.

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- (i) **Prohibition on Developing Additional Project Benefits Without Advance Funding.** No development of additional project benefits will be performed before funds for the development are advanced by the non-Federal partner.
 - (b) **No Guarantee of Continual Access to Additional Project Benefits.** Risk shall be addressed in the contract to the extent necessary.
 - (c) **Payment of Operation, Maintenance, and Replacement (OM&R) Costs.** The CFA will establish the allocation of OM&R costs that result from the development of additional project benefits and the non-Federal partner's obligation to pay the allocated OM&R costs associated with the additional project benefits (RM Policy, *Allocation of Operation, Maintenance, and Replacement Costs* ([PEC P07](#))).
- B. Basis of Negotiation (BON) Requirements.** RM Delegations of Authority Section N.5. requires a delegation of authority from the Commissioner for any CFA exceeding \$25,000 in advance funds for water contracting activities. Where required, the RD will request a delegation of authority through the BON process in accordance with RM D&S, *Preparing Bases of Negotiation for New and Amendatory Water Service, Repayment, and Other Water-Related Contracts* ([PEC 06-01](#)). A required BON will include the general content requirements of PEC 06-01 and the following:
- (1) **Estimate of Costs.** The BON will provide an initial estimate of the costs to develop the proposed additional project benefits and an initial allocation of such costs to the non-Federal partner.
 - (2) **Assurance of Funds.** A written statement from the non-Federal partner stating the source of its funding and confirming funding is available for the proposed development will be included as an attachment to the BON.⁶
 - (3) **Proposed Term of Contributed Funds Agreement.** The BON will identify the proposed term of the CFA.
 - (4) **Title to Remain with the U.S.** Title to project works that are constructed to develop additional project benefits will remain with the U.S. unless otherwise provided by the Congress.
- 6. Determination of Feasibility.** Once the Commissioner concurs with the responsible RD and the Director that studying additional project benefits is consistent with the SOD Act and potentially in the interest of the U.S., the RD will oversee a feasibility level analysis and

⁶The Assurance of Funds requirement may be waived if the non-Federal partner instead provides a surety bond for the estimated costs of developing additional project benefits.

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develop supporting documentation to determine if the proposed additional project benefits meet the determination of feasibility requirements outlined in this D&S. This feasibility level analysis should be prepared by the non-Federal entity with oversight and input from DSO and the Reclamation Law Administration Division (RLAD). The Director will use the determination of feasibility report and feedback provided by DSO and RLAD to develop an approval memorandum for the Secretary's decision on whether the project is consistent with the SOD Act, in the interest of the U.S., and feasible.

A. **Determination of Feasibility Report Contents.** The Determination of Feasibility Report should generally comply with Water and Related Resources Feasibility Studies (CMP 09-02), as modified per this directive which takes precedence. This allows Reclamation to assess the feasibility of the proposed additional benefits project. At a minimum, the following information shall be included:

(1) **Introductory Information.**

- (a) Identification of the non-Federal partner(s).
- (b) Description of the study area and an area/project map.
- (c) Letter from the Commissioner indicating approval to move forward with a Determination of Feasibility.

(2) **Timeline for proposed determination of feasibility as well as the proposed project timeline.**

(3) **Statement of problem and needs.**

- (a) Describe the current and future water demand and supply and how this was developed. Baseline supply and demand should be consistent across alternatives.
- (b) Description of the need for additional project benefits, the current and future demand/quantity/amount, their economic value, their use, and how they will be achieved.

(4) **Alternatives.** The viability of an alternative will be determined through an evaluation of its acceptability, efficiency, effectiveness, and completeness as required in the Principles, Requirements, and Guidelines for Water and Land Related Resources Implementation Studies (PR&G). The Determination of Feasibility analysis must describe and evaluate at least the following alternatives:

- (a) SOD modification alternative (equivalent to a no-action or baseline alternative in a typical planning study). This alternative has been developed and analyzed as part of the Safety of Dams Modification Project.

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- (b) Dam safety plus additional benefits project alternative (i.e., Joint Project).
 - (c) Non-structural alternative that meets the needs and objectives of the additional benefits project.
 - (d) Feasibility level costs and benefits shall be developed for the stand alone “additional benefits only” alternative.
- (5) **Evaluation.** The alternatives must be evaluated using the four criteria described below.
- (a) **Technical Feasibility.** The determination of technical feasibility will be demonstrated with a feasibility-level design and cost estimate for the Joint Project alternative prepared to the same standard as the SOD modification alternative. The Joint Project alternative must be consistent with the design ([FAC P03, *Performing Design and Construction Activities*](#)), risk ([2022 PPG](#)), and cost estimate ([FAC P09, *Cost Estimating*](#))⁷ requirements used for the SOD Modification alternatives. The Additional Benefits alternative will be subject to the same standards and peer review as the SOD modification alternative, including consultant review boards and Dam Safety Advisory Team reviews.⁸ If the non-structural alternative is not viable (i.e., cost or implementation difficulty), an appraisal level design and cost estimate is acceptable for use in the comparison and should be indicated as such.
 - (b) **Environmental Feasibility.** The determination of environmental feasibility will be demonstrated through compliance with NEPA and other Federal environmental and cultural resource laws. Under supervision and review from Reclamation,⁹ the non-Federal partner is responsible for developing the NEPA document used to determine environmental feasibility of the additional benefits. Reclamation is responsible for determining the adequacy of the NEPA documents. Existing NEPA compliance and supporting environmental documentation and review may suffice for determination of environmental feasibility.
 - (c) **Economic Feasibility.** The determination of economic feasibility of the Joint Project alternative shall be accomplished through a benefit-cost analysis, as specified in the Department of the Interior (DOI) *Agency Specific*

⁷Refer to RM Policy, *Cost Estimating* (FAC P09), and RM D&Ss, *Cost Estimating* ([FAC 09-01](#)), *Construction Cost Estimates and Project Cost Estimates* ([FAC 09-02](#)), and *Representation and Referencing of Cost Estimates in Bureau of Reclamation Documents Used for Planning, Design and Construction* ([FAC 09-03](#)).

⁸ There may be conditions that exist where we may deviate but those need to be identified. In cases where there are additional resources or a variation in resources, those discrepancies will need to be identified and justified.

⁹[eCFR: 40 CFR 1506.5 -- Agency responsibility for environmental documents.](#)

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*Procedures For Implementing the Council on Environmental Quality's Principles, Requirements, and Guidelines for Water and Land Related Resources Implementation Studies (ASP).*¹⁰ This assessment needs to identify the economic benefits that implementation would realize, relative to costs.

- (d) **Financial Feasibility.** The determination of financial feasibility will be demonstrated by the non-Federal partner obtaining the necessary funds for completion of the additional benefits project. A financial capability statement by each non-Federal partner must be included in the documentation along with a financing plan, a bond rating, and a commitment to provide up-front funding or obtain a bond for the amount necessary to cover potential costs incurred by Reclamation if the non-Federal partner abandons the additional benefits project during design, construction, or any time prior to completion.

Investment in the construction of the additional project benefits program will result in the loss of any Aid to Irrigation (as defined in PEC 11-01) that a non-Federal partner may receive for allocated SOD modification costs.

- (6) **Economic comparison of alternatives that would not change underlying project benefits from the proposed SOD modification.** Alternatives used for comparison must be likely and realistic and developed with the same standards with respect to interest rates (see latest published Water Resources Planning rate), price level, and period of analysis (consistent with the anticipated useful life of the investment).
- (a) The benefits of the project measured must be consistent with the methods described in Paragraph 7.B. of DOI's ASP for Implementing the Council on Environmental Quality's Principles, Requirements, and Guidelines for Water and Land Related Resources Implementation Studies (707 DM 1). If demonstrating the cost of the alternative most likely to be implemented in the absence of the project as a measure of benefit, it is assumed that the two alternatives would provide comparable levels of service.
- (b) The Joint Project documentation will present and, to the extent practicable, quantify and monetize the public benefits (measured consistent with the methods described in DOI's ASP for Implementing the Council on Environmental Quality's Principles, Requirements, and Guidelines for Water and Land Related Resources Implementation Studies (707 DM 1)) resulting from the Joint Project alternative.

¹⁰ There may be conditions that exist where we may deviate but those need to be identified. In cases where there are additional resources or a variation in resources, those discrepancies will need to be identified and justified.

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- (c) If benefits cannot be quantified, they must be qualitatively described as completely as possible. These qualitative benefits can be considered as part of the justification for a project in conjunction with the comparison of project costs described above. The same can hold true for costs that cannot be monetized.
 - (d) The economic feasibility documentation for the Joint Project alternative will support the analysis and decision-making for the non-Federal partner to fund the additional benefits project. Because the non-Federal partner will be funding the additional benefits project up front and financial feasibility has been demonstrated, Reclamation will not require that the alternative with the highest benefit-cost ratio be selected. However, in the best interest of the non-Federal entities, any partners, the Federal government, and the public, and to be consistent with the PR&G, the benefit-cost ratio must be greater than one for the project to be deemed feasible.
- (7) **Appendices.** At a minimum, the following documents shall be attached to the Determination of Feasibility Report.
- (a) NEPA Documentation (Final EA/EIS, Final ROD/FONSI).
 - (b) Board resolution authorizing the additional benefits project and commitment to provide up-front funding.
 - (c) If necessary, bond to cover potential costs incurred by Reclamation if the additional benefits project is abandoned.
 - (d) Technical reports related to the analyses.
 - (e) modeling information, assumptions, and data.
- B. **Review.** In addition to the Consultant Review Board and/or Design Engineering and Construction reviews, all feasibility documentation will undergo a certification review as described in RM D&S, *Safety of Dams Modification Reports for Submission to the Congress* ([FAC 06-03](#)) prior to moving forward with a recommendation to the Secretary. The certification review team will include a representative from RLAD and DSO. The Secretary will review the complete feasibility documentation and determine whether the additional benefits project is consistent with the SOD Act, in the interest of the U.S., and feasible.
7. **Risk and Uncertainty.** Reclamation cannot supply a guarantee that the project or additional project benefits will be pursued. There is inherent cost and risk associated with undertaking a project for which Reclamation cannot be held responsible. Examples include but are not limited to: seismic events or other natural or human-caused disasters or events,

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unforeseen environmental issues, and Tribal concerns. Reimbursement of expenditures by Reclamation cannot be expected unless a pre-signed agreement is in place.

- A. **Identification of Water Rights.** Any water rights issues potentially resulting from implementation of the additional benefits alternative shall be examined. The RD will determine if project water rights (if applicable) exist to utilize additional project capacities resulting from the development of additional project benefits. If existing project water rights are insufficient to utilize additional project capacities, the RD will determine if new water rights may be acquired or if non-project water rights are available to utilize the additional project capacities. If insufficient water rights from either project or non-project sources exist to fully utilize the additional project benefits, the RD will recommend to the Director that further development of additional project benefits be postponed until water rights may be identified.
 - B. **Legal or institutional barriers.** These may include legal and institutional (e.g., contractual water supply obligations, Indian trust responsibilities, water rights settlements, regional water quality control board requirements), state, and/or local requirements with the potential to affect implementation of the additional benefits project.
 - C. The Determination of Feasibility Report will account for the uncertainty of future conditions by incorporating risk and uncertainty analysis into the formulation, evaluation, and comparison of alternatives.
 - D. If Reclamation determines that there is an increase in project, construction, schedule, or any other type of risk, it may terminate the additional benefits project.
8. **Notification of Determination.** The RD will notify each non-Federal partner of the ultimate determination (required by Section 5.B., of the SOD Act) after the Secretary and Reclamation have made their decision.
 9. **Appendices.**
 - A. **Appendix A.** Contributed Funds Agreement Example.
 - B. **Appendix B.** Task Order Example.
 - C. **Appendix C.** Additional Project Benefits Cost and Cost Savings Allocation Example.
 - D. **Appendix D.** Illustrated workflow of the step-by-step process for developing additional project benefits in conjunction with a SOD modification project.
 10. **Definitions.**

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- A. **Additional Project Benefits.** Including but not limited to additional conservation storage capacity, as developed in conjunction with a proposed SOD modification that increases the benefits provided by a project beyond those existing at the time a SOD modification is undertaken. This increase may only be realized through an expansion of the existing authorized project purposes and should be clearly defined in the CFA.
 - B. **Non-Federal Partner.** Entity outside the Federal government seeking development of additional benefits.
 - C. **Incidental Benefits.** Benefits resulting from the development of the stated additional project benefits that are not specifically mentioned in the CFA and are not included in the allocation of costs (non-reimbursable). One example is increased recreation benefits due to a higher reservoir elevation when a cost-share partner is not identified.
11. **Review Period.** The originating office will review this release every four years.

RECLAMATION MANUAL TRANSMITTAL SHEET

Effective Date: _____

Release No. _____

Ensure all employees needing this information are provided a copy of this release.

Reclamation Manual Release Number and Subject

Summary of Changes

NOTE: This Reclamation Manual release applies to all Reclamation employees. When an exclusive bargaining unit exists, changes to this release may be subject to the provisions of collective bargaining agreements.

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