



A Water Recycling Practitioner's Guide to the *Infrastructure Investment and Jobs Act of 2021*

The *Infrastructure Investment and Jobs Act of 2021* (IIJA) provides federal funding for a range of new and existing water infrastructure programs, including those aimed at helping communities adopt and expand water recycling systems.

The IIJA provides funding for Bureau of Reclamation (Bureau) programs, which are available to eligible entities in 17 Western states, as well as for nationwide programs administered by the U.S. Environmental Protection Agency (EPA).

Overall, the bill contains \$1 billion for Western water recycling programs through the Bureau and roughly \$48 billion for nationwide programs administered by EPA's Office of Water.

I. Bureau of Reclamation

The IIJA provides direct appropriations for two Bureau of Reclamation water recycling programs—the Title XVI Water Reclamation and Reuse Grants Program and a new grant program for large-scale water recycling projects.

A. Competitive Grant Program for Large-Scale Water Recycling and Reuse Projects

Note: Because this is a newly authorized program, the Bureau is likely to issue a guidance or a rulemaking to outline discretionary implementation decisions. The information below is based solely on the statutory language dictated in the Infrastructure Investment and Jobs Act.

1. Eligibility

To be eligible for funding through the program, the applicant must be:

- a State, Indian Tribe, municipality, irrigation district, water district, wastewater district, or other organization with water or power delivery authority;
- a State, regional, or local authority, the members of which include 1 or more organizations with water or power delivery authority; or
- an agency established under State law for the joint exercise of powers or a combination of entities described in subparagraphs (A) and (B).

To be eligible for funding through the program, the proposed project must:

- reclaim and reuse either:

- municipal, industrial, domestic, or agricultural wastewater; or
 - impaired groundwater or surface water;
- have a total estimated cost of \$500,000,000 or more;
- be located in a Reclamation state;
- be constructed, operated, and maintained by an eligible entity; *and*
- provide a federal benefit in accordance with the reclamation laws.

2. Use of Funds

Grant funding through the program can be used for planning, design, and/or construction of eligible projects that provide substantial water supply and other benefits to the Reclamation states.

3. Completion of a Feasibility Study

In order to be eligible for funding through the program, the applicant must have completed a feasibility study or equivalent study for the proposed project. Based on the findings of the study, the Bureau must be able to conclude that the proposed project:

- is technically and financially feasible;
- provides a federal benefit in accordance with the reclamation laws; and
- is consistent with applicable federal and state laws.

Within one year of enactment of the IJJA, the Bureau will issue guidance on the development of feasibility or equivalent studies. However, we expect study requirements for this program to largely track with existing study requirements for the Title XVI Water Reclamation and Reuse Grants Program (see Appendix A).

4. Cost-Share and Matching Funds

The eligible entity must be financially solvent and have sufficient non-federal funding available to complete the eligible project, as determined by the Bureau. The federal share of the cost of any project provided a grant under the program shall not exceed 25 percent of the total cost of the eligible project. The IJJA does not impose a dollar limit on the amount of federal cost share that can be provided.

5. Prioritization

The legislation directs the Bureau to prioritize certain applications over others. Priority shall be given to projects that meet one or more of the following criteria:

- the eligible project provides multiple benefits, including water supply reliability benefits for drought-stricken States and communities, fish and wildlife benefits, and water quality improvements;

- the eligible project is likely to reduce impacts on environmental resources from water projects owned or operated by federal and state agencies, including through measurable reductions in water diversions from imperiled ecosystems;
- the eligible project would advance water management plans across a multi-State area, such as drought contingency plans in the Colorado River Basin;
- the eligible project is regional in nature;
- the eligible project is collaboratively developed or supported by multiple stakeholders.

B. Title XVI Water Reclamation and Reuse Grants Program

The IIJA provides \$550 million in direct appropriations for the Title XVI Water Reclamation and Reuse Grants Program, which has two components—a competitive grants component known as Title XVI-WIIN, and an earmark component known as the “legacy” portion of Title XVI. All projects under the latter portion of the program were individually authorized by Congress between 1992 and 2009, and some have not yet been completed or have not yet reached their funding caps. Under Title XVI-WIIN, the competitive grants portion of the program, any eligible entity can apply and compete for funding.

The \$550 million provided in the IIJA is for the Title XVI program as a whole, including both the legacy and WIIN components. In recent years, annual demand for legacy project funding has been roughly \$15 million to \$20 million, while annual demand for Title XVI-WIIN has been roughly \$125 million to \$215 million.

1. Eligibility

To be eligible for funding through the Title XVI-WIIN program, the project must:

- reclaim and reuse either:
 - municipal, industrial, domestic, or agricultural wastewater; or
 - impaired groundwater or surface water; and
- be located in a Reclamation state.

2. Use of Funds

Grant funding through the program can be used for planning, design, and/or construction of eligible projects.

3. Feasibility Studies

In order to be eligible for funding through the program, the applicant must have completed and submitted a Title XVI Feasibility Study for the proposed project. Based on the findings of the study, the Bureau must be able to conclude that the proposed project:

- is technically and financially feasible;
- provides a federal benefit in accordance with the reclamation laws; and

- is consistent with applicable federal and state laws

Title XVI Feasibility Studies must conform with the requirements outlined in Reclamation Manual Release WTR 11-01 (see Appendix A).

If the proposed project has changed since approval of an earlier feasibility study (e.g., a different location has been chosen for a pump station, a pipeline alignment has changed, or new customers have been added), the work may still be eligible for funding if it is within the general scope of the project described in the feasibility study. If it is a substantial change in the scope of the project, then the feasibility study may need to be amended and re-reviewed by the Bureau. This determination will be made on a project-specific basis.

4. Cost-Share and Matching Funds

The eligible entity must be financially solvent and have sufficient non-federal funding available to complete the eligible project, as determined by the Bureau. The federal share of the cost of any project provided a grant under the program shall not exceed 25 percent of the total cost of the eligible project, or \$20 million, whichever is less.

5. Prioritization

The legislation directs the Bureau to prioritize applications for projects that:

- are in areas that have been identified by the United States Drought Monitor as experiencing severe, extreme, or exceptional drought at any time in the 4-year period before such funds are made available; or areas that were designated as disaster areas by a state during the 4-year period before such funds are made available; and
- meet one or more of the following criteria:
 - projects that are likely to provide a more reliable water supply for states and local governments;
 - projects that are likely to increase the water management flexibility and reduce impacts on environmental resources from projects operated by federal and state agencies;
 - projects that are regional in nature;
 - projects with multiple stakeholders;
 - projects that provide multiple benefits, including water supply reliability, ecosystem benefits, groundwater management and enhancements, and water quality improvements.

II. U.S. Environmental Protection Agency

The IJA provides direct appropriations for several EPA programs that can support water recycling across the country. These include the Clean Water and Drinking Water State Revolving Fund Programs and a new grant program aimed at helping communities remediate

contamination from per- and polyfluoroalkyl substances (PFAS) and other emerging contaminants.

A. State Revolving Fund (SRF) Programs

The IIJA provides just over \$11.7 billion in base funding for each of the SRF programs, with funding stepping up from \$1.9 billion to \$2.6 billion between FY 2022 and FY 2026. EPA provides SRF funds to states in the form of capitalization grants. The states then use the grant funding to make low-interest loans to communities, which can in turn use the loans to build and improve water recycling systems.

1. Subsidization Requirements

Any state that receives IIJA funding for an SRF capitalization grant is required to expend 49 percent of that funding in the form of assistance agreements with *100%* forgiveness of principal or grants (or any combination of these).

2. Other Program Information

Apart from the additional subsidization, the IIJA includes no major modifications to the SRF programs' eligibility criteria, selection criteria, prioritization criteria, or other program components.

B. Additional Funding for PFAS Remediation

The IIJA provides an additional \$1 billion through the Clean Water SRF, \$4 billion through the Drinking Water SRF, and \$5 billion through a small communities grants program, all for the remediation of per- and polyfluoroalkyl substances (PFAS) and other emerging contaminants (CECs).

1. Clean Water SRF

The funding for CEC and PFAS remediation provided through the Clean Water SRF is not subject to the SRF's typical matching or cost share requirements. These funds are to be provided as assistance agreements with *100%* principal forgiveness or as grants (or as a combination of these).

2. Drinking Water SRF

As with funding provided through the Clean Water SRF, the funding for CEC and PFAS remediation provided through the Drinking Water SRF is not subject to typical matching requirements. Funding is to be provided as assistance agreements with *100%* principal forgiveness or as grants (or as a combination of these)

Not less than 25% of the funding shall be used to provide grants to disadvantaged communities or public water systems serving fewer than 25,000 persons.

In selecting recipients, states shall prioritize projects that address the most serious risk to human health, are necessary to ensure compliance with statutory requirements, and assist systems most in need on a per household basis according to state affordability criteria.

3. Small and Disadvantaged Communities Grants

The funding for CEC and PFAS remediation provided through the Small and Disadvantaged Communities Grants Program is not subject to the program's typical statutory matching or cost share requirements.

Projects that receive this funding must support communities that (a) under affordability criteria established by the state, are determined by the state to be disadvantaged, or (b) have a population of less than 10,000 individuals and do not have the capacity to incur debt sufficient to finance a project.

The IIJA exempts these funds from other programmatic requirements, including the requirement that, in order to be eligible for funds under this program, communities must lack household drinking water or wastewater services; or must be served by a public water system that violates or exceeds a requirement of a national primary drinking water regulation. Apart from the exemptions noted above, all other existing program components and requirements apply to the IIJA funding for this program.

Appendix A: Feasibility Study Guidelines Under Title XVI Program

Projects eligible for funding under the WIIN Act include those that have a completed feasibility study that has been reviewed by the Bureau and found to meet all the requirements of Reclamation Manual Release WTR 11-01.

Reclamation Manual Release WTR 11-01 states the following:

Requirements for a Water Reclamation, Recycling or Desalination Feasibility Study Report.

A. Flexibility Concerning Format. Reclamation will accept for review a water reclamation, recycling or desalination feasibility study report prepared for other purposes (e.g., as part of an application for state funding programs). However, when a report prepared for other purposes is reviewed, the project sponsor must provide a crosswalk that identifies the sections and page numbers that clearly address each element described in Paragraph 3.

B. Water Reclamation, Recycling or Desalination Feasibility Study Report Contents. Failure to provide a crosswalk that clearly addresses each of the required elements will result in the feasibility study not passing the initial review, and/or result in the report being found incomplete. To ensure that a water reclamation, recycling or desalination feasibility study report complies with Pub. L. 102-575, as amended, other Federal laws, and to otherwise allow Reclamation to assess the feasibility of the proposed project, at a minimum the following information shall be included.

(1) Introductory Information. Provide the following introductory information.

(a) identification of the non-Federal project sponsor(s);

(b) a description of the study area and an area/project map; and

(c) a definition of the study area in terms of both the site-specific project area where the reclaimed water supply will be needed and developed, and any reclaimed water distribution systems.

(2) Statement of Problems and Needs. Describe key water resource management problems and needs for which a water reclamation, recycling or desalination project will provide a solution, including the following information. All projections shall be reasonable and applicable for a minimum of 20 years.

(a) Description of the problem and need for a water reclamation, recycling or desalination project.

(b) Description of current and projected water supplies, including water rights, and potential sources of additional water other than the proposed water reclamation, recycling or desalination project, and plans for new facilities other than the proposed project, if any.

(c) Description of current and projected water demands, including a description of the current and projected water supply and demand imbalances.

(d) Description of any water quality concerns for the current and projected water supply.

(3) Water Reclamation, Recycling or Desalination Opportunities. Address the opportunities for water reclamation, recycling and desalination in the study area, and identify the sources of water that could be reclaimed or desalinated, including the following information.

(a) Description of all uses for reclaimed or desalinated water, or categories of potential uses, including, but not limited to, environmental restoration, fish and wildlife, groundwater recharge, municipal, domestic, industrial, agricultural, power generation, and recreation. Identify any associated water quality, and associated treatment requirements.

(b) Description of the water market available to utilize reclaimed, recycled or desalinated water, including:

(i) Identification of existing and potential users, expected use, peak use, onsite conversion costs if necessary, desire to use reclaimed, recycled or desalinated water, including letters of intent if available.

(ii) Description of any consultation with potential reclaimed, recycled or desalinated water customers. Letters of intent must be included, if applicable.

(iii) Description of the market assessment procedures used.

(c) Discussion of considerations (for example: physical, converting systems for reused water, or public acceptance) which will prevent implementing a water reclamation, recycling or desalination project. Identify methods or community incentives to stimulate reclaimed, recycled or desalinated water demand, and methods to eliminate obstacles which will inhibit the use of reclaimed, recycled or desalinated water, including pricing.

(d) Identification of all the water and wastewater agencies that have jurisdiction in the potential service area or over the sources of reclaimed, recycled or desalinated water.

(e) Description of potential sources of water to be reclaimed, recycled or desalinated, including impaired surface and ground waters.

(f) Description and location of the source water facilities, including capacities, existing flows, treatment processes, design criteria, plans for future facilities, and quantities of impaired water available to meet new reclaimed, recycled and desalinated water demands.

(g) Description of any current water reclamation, recycling or desalination taking place in the study area, including a list of reclaimed water uses, type and amount of reuse, and a map of existing pipelines and use sites.

(h) Description of current and projected wastewaters and disposal options other than the proposed water reclamation, recycling or desalination project, and plans for new wastewater facilities, including projected costs, if any.

(i) Summary of any water reclamation, recycling and desalination technology currently in use in the study area, and opportunities for development of improved technologies.

(4) Description of Alternatives. The following information is required:

(a) Description of the non-Federal funding condition. The reasonably foreseeable future actions that the non-Federal project sponsor would take if Federal funding were not provided for the proposed water reclamation, recycling or desalination project, including estimated costs.

(b) Statement of the specific objectives all alternatives, including the water reclamation, recycling or desalination project, are designed to address.

(c) Description of the proposed water reclamation, recycling or desalination project including detailed project cost estimate; annual operation, maintenance, and replacement cost estimate; and life cycle costs shall be provided with sufficient detail to permit a more in-depth evaluation of the project, including non-construction costs. In this regard, the cost estimates shall clearly identify expenditures for major structures and facilities, as well as other types of construction and non-construction expenses and shall be based on calculated quantities and unit prices.

(d) The estimated costs shall also be presented in terms of dollars per million gallons (MG), and/or dollars per acre-foot of capacity, to facilitate comparison of alternatives described in Paragraph 4.B.(5) below. References, design data, and assumptions

must be identified. The level of detail shall be as required for feasibility studies in RM D&S, Cost Estimating (FAC 09-01).

(e) Description of waste-stream discharge treatment and disposal water quality requirements, if applicable, for the proposed water reclamation, recycling or desalination project.

(f) Description of one or more alternative technologies that could be used in the proposed water reclamation, recycling or desalination project under consideration. Where a project only consists of reclaimed, recycled or desalinated water distribution, alternative plans for distribution or implementation will be provided. These alternatives must be approvable by the state(s) or tribal authorities in which the project will be located.

(5) Economic Analysis. A water reclamation, recycling or desalination feasibility study report must include an economic analysis of the proposed water reclamation, recycling or desalination project relative to other water supply alternatives that could be implemented by the non-Federal project sponsor in lieu of a water reclamation, recycling or desalination project. This assessment needs to identify the degree to which the water reclamation, recycling or desalination project alternative is cost-effective, and the economic benefits that are to be realized after implementation. The study lead must submit the following information for the economic analysis in a water reclamation, recycling or desalination feasibility study report.

(a) The economic analysis included in the feasibility study report shall describe the conditions that exist in the area and provide projections of the future with, and without, the project. Emphasis in the analysis must be given to the contributions that the plan could make toward alleviation of economic problems and the meeting of future water demand.

(b) A cost comparison of alternatives that would satisfy the same demand as the proposed water reclamation, recycling or desalination project. Alternatives used for comparison must be likely and realistic, and developed with the same standards with respect to interest rates and period of analysis.

(c) Description of other water supply alternatives considered to accomplish the objectives to be addressed by the proposed water reclamation, recycling or desalination project, including benefits to be gained by each alternative, total project cost, life cycle cost, and corresponding cost of the project water produced expressed in dollars per MG, and/or dollars per acre-foot. An appraisal level cost estimates, or better, is acceptable for these alternatives.

(d) When a water reclamation, recycling or desalination project provides water supplies for municipal and industrial use, the benefits of the project can be

measured in terms of the cost of the alternative most likely to be implemented in the absence of the project. This is assuming that the two alternatives would provide comparable levels of service. This comparison must be provided, if applicable.

(e) Some water reclamation, recycling or desalination project benefits will be difficult to quantify; for example, a drought tolerant water supply, reduced water importation, and other social or environmental benefits. These benefits shall be documented and described qualitatively as completely as possible. These qualitative benefits can be considered as part of the justification for a water reclamation, recycling or desalination project in conjunction with the comparison of project costs described above.

(6) Selection of the Proposed Water Reclamation, Recycling or Desalination Project.

(a) Provide a justification of why the proposed water reclamation, recycling or desalination project is the selected alternative in terms of meeting objectives, demands, needs, cost effectiveness, and other criteria important to the decision.

(b) Provide an analysis and, if applicable, an affirmative statement of whether the proposed water reclamation, recycling or desalination project would address the following:

(i) reduction, postponement, or elimination of development of new or expanded water supplies;

(ii) reduction or elimination of the use of existing diversions from natural watercourses, or withdrawals from aquifers;

(iii) reduction of demand on existing Federal water supply facilities; and

(iv) reduction, postponement, or elimination of new or expanded wastewater facilities.

(7) Environmental Consideration and Potential Effects. The review of a water reclamation, recycling or desalination feasibility study report does not require National Environmental Policy Act (NEPA) compliance. The Department of the Interior categorical exclusion 1.11 "Activities which are educational, informational, advisory, or consultative to other agencies, public and private entities, visitors, individuals or the general public" applies to Reclamation's consultative review, and preparation of the water reclamation, recycling or desalination feasibility study reports. As stated in Paragraph 1. Scope, Reclamation is not making a recommendation to go forward with the proposed water reclamation, recycling or desalination project, nor is Reclamation using the water reclamation, recycling or desalination feasibility study report to propose an action to the Congress.

(a) The water reclamation, recycling or desalination feasibility study report must include sufficient information on the proposed water recycling or desalination project to allow Reclamation to assess the potential measures and costs that will be necessary to comply with NEPA, and any other applicable Federal law. Accordingly, the following information is required.

(i) Discussion whether, and to what extent, the proposed water reclamation, recycling or desalination project will have potentially significant impacts on endangered or threatened species, public health or safety, natural resources, regulated waters of the United States, or cultural resources.

(ii) Discussion whether, and to what extent, the project will have potentially significant environmental effects, or will involve unique or undefined environmental risks.

(iii) Description of the status of required Federal, state, tribal, and/or local environmental compliance measures for the proposed water reclamation, recycling or desalination project, including copies of any documents that have been prepared, or results of any relevant studies.

(iv) Any other information available to the study lead that would assist with assessing the measures that will be necessary to comply with NEPA, and other applicable Federal, state or local environmental laws such as the Endangered Species Act or the Clean Water Act.

(v) Discussion of how the proposed water reclamation, recycling or desalination project will affect water supply and water quality from the perspective of a regional, watershed, aquifer, or river basin condition.

(vi) Discussion of the extent to which the public was involved in the feasibility study, and a summary of comments received, if any.

(vii) Description of the potential effects the project will have on historic properties. Discussion must include potential mitigation measures, the potential for adaptive reuse of facilities, an analysis of historic preservation costs, and the potential for heritage education, if necessary.

(b) If, at a later date, Reclamation provides funds for construction, all appropriate NEPA and other environmental and cultural compliance must be completed prior to any ground disturbing activities beginning in order for the project to be eligible.

(8) Legal and Institutional Requirements. The water reclamation, recycling or desalination feasibility study shall identify any legal or institutional requirements, or barriers to implementing the proposed project.

(a) Analysis of any water rights issues potentially resulting from implementation of the proposed water reclamation, recycling desalination project. All proposed water reclamation, recycling or desalination projects must comply with state water law.

(b) Discussion of legal and institutional requirements (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 project. Water reclamation, recycling or desalination projects using Reclamation project water must address contractual requirements as described in RM D&S, Reuse of Bureau of Reclamation Project Water (PEC 05-09).

(c) Discussion of the need for multi-jurisdictional or interagency agreements, any coordination undertaken, and any planned coordination activities.

(d) Discussion of permitting procedures required for the implementation of water reclamation, recycling or desalination projects in the study area, and any measures that the non-Federal project sponsor can implement that could speed the permitting process.

(e) Discussion of any unresolved issues associated with implementing the proposed water reclamation, recycling or desalination project, how and when such issues will be resolved, and how the project would be affected if such issues are not resolved.

(f) Identification of current and projected wastewater discharge requirements resulting from the proposed water reclamation, recycling or desalination project (e.g., brine disposal).

(g) Description of rights to wastewater discharges resulting from implementation of the proposed water reclamation, recycling or desalination project.

(9) Financial Capability of Sponsor. At the water reclamation, recycling or desalination feasibility study stage, Reclamation must request enough information to determine that the non-Federal project sponsor is likely to demonstrate financial capability if the project moves to construction. Reclamation will request more detailed information to make a determination that the non-Federal project sponsor is financially capable of funding the non-Federal share of the project's costs before a funding agreement covering construction can be executed. Accordingly, the following information is required to be included in the water reclamation, recycling or desalination feasibility study report.

(a) Proposed schedule for project implementation.

(b) Discussion of the willingness of the non-Federal project sponsor to pay for its share of capital costs and the full operation, maintenance, and replacement costs.

(c) A plan for funding the proposed water reclamation, recycling or desalination project's construction, operation, maintenance, and replacement costs, including an analysis of how the non-Federal project sponsor will pay construction and annual operation, maintenance, and replacement costs.

(d) Description of all Federal and non-Federal sources of funding and any restrictions on such sources, for example, minimum or maximum cost-share limitations. Generally, for water reclamation, recycling or desalination projects, the Federal cost share is limited to 25 percent, or \$20,000,000, whichever is less.

(10) Research Needs. At a minimum, the report must include a statement on whether the proposed water reclamation, recycling or desalination project includes basic research needs, and the extent that the proposed project will use proven technologies and conventional system components. The following information is required only if further research is necessary to implement the proposed water reclamation, recycling or desalination project:

(a) description of research needs associated with the proposed water reclamation, recycling or desalination project, including the objectives to be accomplished through research;

(b) description of the basis for Reclamation participation in the identified research;

(c) identification of the parties who will administer and conduct necessary research; and

(d) identification of the timeframe necessary for completion of necessary research.