

RECLAMATION

Managing Water in the West

WaterSMART:

Final Funding Criteria for the Title XVI Water Reclamation and Reuse Program



Background and Applicability

Title XVI of P.L. 102-575, as amended (Title XVI), directs the Secretary of the Interior, acting through Reclamation's Commissioner, to undertake a program to identify and investigate opportunities to reclaim and reuse wastewaters and naturally impaired ground and surface water in the 17 Western States and Hawaii. Title XVI also provides authority for the Secretary to provide up to the lesser of 25 percent of, or the Federal appropriations ceiling (typically \$20 million) for, the cost of planning, design, and construction of specific water recycling projects.

The Title XVI Program is part of the Department of the Interior's WaterSMART (Sustain and Manage America's Resources for Tomorrow) program to work toward a sustainable water strategy to meet the Nation's water needs. For purposes of the Title XVI program, a water reuse project is a project that reclaims and reuses municipal, industrial, domestic, or agricultural wastewater and naturally impaired groundwater and/or surface waters. Reclaimed water can be used for a variety of purposes, such as environmental restoration, fish and wildlife, groundwater recharge, municipal, domestic, industrial, agricultural, power generation, or recreation. Water reuse is an essential tool in stretching the limited water supplies in the West.

Title XVI projects develop and supplement urban and irrigation water supplies through water reuse, thereby improving efficiency, providing flexibility during water shortages, and diversifying the water supply. Title XVI projects provide growing communities with new sources of clean water while promoting water and energy efficiency and environmental stewardship.

Reclamation plans to use the following criteria as part of funding opportunity announcements to identify projects to receive available funding in fiscal year (FY) 2011. In the future, Reclamation plans to use these criteria as part of the process of allocating program funding.

A. Construction Activities

Eligibility

A funding opportunity will be open to sponsors of authorized Title XVI projects. Applications for funding may be submitted for (1) construction activities that can be commenced in FY 2011 and completed within 24 months or (2) construction activities that have been completed previously without Federal funding.

To be eligible to receive funding for construction activities, a water reclamation and reuse project must be specifically authorized under Title XVI. Funds for construction activities associated with an individual project will not be disbursed

until all Title XVI pre-construction requirements have been met for that project. These include: (1) a finding that the feasibility study meets the requirements of Title XVI; (2) complete compliance with the National Environmental Policy Act and other environmental clearances; (3) an approved determination of financial capability; and (4) an executed financial assistance agreement between Reclamation and the project sponsor.

If the amount of Federal funds currently received (including obligated funds) for the project is less than 25 percent of the overall expenses, then the project sponsor may request Federal funds greater than 25 percent for the proposed activity as long as the overall Federal cost share does not exceed 25 percent of incurred expenses.

The FY 2011 selection process will be similar to steps used in 2009 to allocate \$135 million in funding to Title XVI projects under the American Recovery and Reinvestment Act.

Criteria for Funding of Construction Activities

1a. Stretching Water Supplies – 35 points

Points will be awarded based on the extent to which the project phase is expected to secure and stretch water supplies. Consideration will be given to the amount of water expected to be made available by the project phase and the extent to which the project phase will reduce demands on existing facilities and otherwise reduce water diversions.

- (a) How many acre-feet of water are expected to be made available each year upon completion of the project or phase?
- (b) Will the project reduce, postpone, or eliminate the development of new or expanded non-recycled water supplies?
- (c) How significantly will the demand on existing Federal water supplies be reduced? List the expected reduction to Federal water supply demand (in acre-feet) and the amount of water currently supplied directly or indirectly by a Federal facility to the project sponsor. Provide calculations.
- (d) How will the project reduce diversions from natural watercourses or withdrawals from aquifers? Responses should be specific (including number of acre-feet) and should include the percentage by which diversions or withdrawals will be reduced.

(e) What performance measures will be used to quantify actual benefits upon completion of the project phase?

1b. Contributions to Water Supply Sustainability – 20 points

Points will be awarded for projects phases that contribute to a more sustainable water supply.

(a) Will the project make water available to address a specific concern (e.g., water supply shortages due to climate variability, and/or heightened competition for limited water supplies)? Consider the number of acre-feet of water to be made available and explain the specific concern and the role of the project in addressing that concern.

(b) Will water made available by this project phase continue to be available during periods of drought? To what extent is the water made available by this project phase more drought-resistant than alternative water supply options? Explain.

2a. Progress Toward Completion of an Authorized Title XVI Project – 20 points

Points will be awarded for project phases that will bring an authorized Title XVI project to completion (i.e., to full Federal funding levels) or close to completion.

How much Federal funding has been provided for the authorized Title XVI project to date? How much Federal funding is necessary to fully satisfy the authorized Federal cost-share?

2b. Readiness to Proceed – 10 Points

Points will be awarded based on the extent to which the project phase is ready to proceed, including consideration of the following:

(a) What is the status of necessary environmental compliance measures? When is environmental compliance expected to be complete? Provide a detailed schedule of all environmental compliance activities and a schedule that indicates when construction is expected to begin.

(b) What is the status of required State and Federal permits for the project phase? When are all required permits expected to be obtained?

3. Environment and Water Quality – 30 points

Points will be awarded based on the extent to which the project phase will improve surface, groundwater, or effluent discharge quality; will restore or enhance habitat for non-listed species; or will provide water or critical habitat for Federally-listed threatened or endangered species:

- (a) Will the project phase improve the quality of surface or groundwater? To what extent will the project phase improve effluent quality beyond levels necessary to meet state or Federal discharge requirements?
- (b) Will the project phase improve flow conditions in a natural stream channel? Will the project phase restore or enhance habitat for non-listed species? If so, how?
- (c) Will the project phase provide water or habitat for Federally listed threatened or endangered species? If so, how?

4. Renewable Energy and Energy Efficiency – 25 points

Points will be awarded based on the extent to which the project phase incorporates the use of renewable energy and/or addresses energy efficiency:

- (a) Will the project phase include installation of low-impact hydroelectric, solar-electric, wind energy, or geothermal power systems, or other facilities that enable use of these or other renewable energy sources to provide power to components of the project phase? Are any energy recovery devices or processes included in the project phase? Provide the amount of energy expected to be generated through renewable energy sources (in kilowatt hours). What percentage of the project's total energy consumption will be provided through the installation of renewable energy components?
- (b) If the project phase does not itself include renewable energy, will the project phase facilitate power generation in the water delivery system by making more water available? If so, explain the relationship between this project phase and any potential renewable energy improvements in the water delivery system.
- (c) Will completion of the project phase lead to a reduction in energy consumption as compared to current water supply options? Provide calculations and describe assumptions and methodology. Will the project phase include any innovative components to reduce energy consumption or to recover energy?
- (d) How does the project phase's energy consumption compare to other water supply options that would satisfy the same demand as the project phase?

5. Cost per Acre-Foot of Water and Other Project Benefits – 25 points

Points will be awarded based on the cost per acre-foot of water expected to be delivered upon completion of the project phase and other benefits of the project phase.

- (a) Calculate the cost per acre-foot of the project phase using the following formula: Annualized Life Cycle Cost (\$) of this project phase/Average annual volume of water (acre-feet) that will be made available upon completion of the project phase.
- (b) Compare the cost per acre-foot of the project phase to the cost per acre-foot of one alternative (i.e., non-recycled water option) that would satisfy the same demand as the proposed project phase.
- (c) Some Title XVI project benefits may be difficult to quantify. Describe any economic benefits of the project phase that are not captured by the cost per acre-foot analysis, or that are difficult to quantify.

6a. Legal and Contractual Water Supply Obligations – 10 Points

Points will be awarded for project phases that help to meet Reclamation's legal and contractual obligations.

Does the project phase help fulfill any of Reclamation's legal or contractual obligations such as providing water for Indian tribes, water right settlements, river restoration, minimum flows, legal court orders, or other obligations? Explain.

6b. Benefits to Rural or Economically Disadvantaged Communities – 10 Points

Points will be awarded based on the extent to which the project phase serves rural communities or economically disadvantaged communities in rural or urban areas.

Does the project phase serve a rural or economically-disadvantaged community? (A rural community is defined as a community with fewer than 50,000 people.) Are any economically-disadvantaged communities within the project sponsor's service area? Will any such communities be served by this project phase? Explain.

7. Watershed Perspective – 15 points

Points will be awarded based on the extent to which the project phase promotes or applies a watershed perspective by implementing an integrated resources management approach, implementing a regional planning effort, or forming a collaborative partnership with other entities. A watershed perspective generally means an approach to planning directed at meeting the needs of geographically dispersed localities across a region or a watershed that will take advantage of economies of scale and foster opportunities for partnerships. This approach also takes into account the interconnectedness of water and land resources, encourages the active participation of all interested groups, and uses the full spectrum of technical disciplines in activities and decision-making.

(a) Does the project phase implement a regional or state water plan or an integrated resource management plan?

(b) Does the project phase promote collaborative partnerships to address water-related issues? Explain.

Total– 200 points

B. Development of Title XVI Feasibility Studies

Eligibility

A second funding opportunity will be open for development of Title XVI feasibility studies. Project sponsors typically complete a Title XVI feasibility study and submit that study to Reclamation prior to seeking Congressional authorization for construction of a new Title XVI project.

Proposed activities should begin in FY 2011 and be completed within 12 months. Applicants may request up to 50 percent of the cost of the development of a feasibility study.

Criteria for Funding of Title XVI Feasibility Study Development

1. Statement of Problems and Needs – 10 points

Points will be awarded based on the presence of watershed-based water resource management problems and needs for which water reclamation and reuse may provide a solution.

2. Water Reclamation and Reuse Opportunities – 15 points

Points will be awarded based on the extent to which the proposal demonstrates that the Title XVI feasibility study will explore opportunities for water reclamation and reuse in the study area.

(a) Describe how the feasibility study will investigate potential uses for reclaimed water (e.g., environmental restoration, fish and wildlife, groundwater recharge, municipal, domestic, industrial, agricultural, power generation, and recreation).

(b) Describe the potential water market available to use any recycled water that might be produced upon completion of a Title XVI project, as well as methods to stimulate recycled water demand and methods to eliminate obstacles to the use of reclaimed water.

(c) Describe the sources of water that will be investigated for potential reclamation, including impaired surface and ground waters.

3. Description of Potential Alternatives – 15 points

Points will be awarded based on the extent to which the proposal demonstrates that the Title XVI feasibility study will develop descriptions of water supply alternatives, including a proposed Title XVI project and other water supply alternatives.

- (a) Describe the objectives all alternatives will be designed to meet. What other water supply alternatives will be investigated as part of the Title XVI feasibility study?
- (b) Provide a general description of the proposed project that will be the subject of a Title XVI feasibility study.
- (c) Describe alternative measures or technologies for water reclamation, distribution, and reuse that will be investigated as part of the Title XVI feasibility study.

4. Stretching Water Supplies – 15 points

Points will be awarded based on the extent to which the proposal demonstrates that the Title XVI feasibility study will address activities that will help to secure and stretch water supplies.

- (a) Describe the potential for the project to reduce, postpone, or eliminate the development of new or expanded water supplies. Include description of any specific issues that will be investigated or information that will be developed as part of the Title XVI feasibility study.
- (b) Describe the potential for the project to reduce or eliminate the use of existing diversions from natural watercourses or withdrawals from aquifers. Include description of any specific issues that will be investigated or information that will be developed as part of the Title XVI feasibility study.
- (c) Describe the potential for the project to reduce the demand on existing Federal water supply facilities. Include description of any specific issues that will be investigated information that will be developed as part of the Title XVI feasibility study.

5. Environment and Water Quality – 15 points

Points will be awarded based on the extent to which the proposal demonstrates that the Title XVI feasibility study will address the potential for a water reclamation and reuse project to improve surface, groundwater, or effluent

discharge quality; restore or enhance habitat for non-listed species; or provide water or critical habitat for Federally-listed threatened or endangered species.

(a) Describe the potential for the project to improve the quality of surface or groundwater, including description of any specific issues that will be investigated or information that will be developed as part of the Title XVI feasibility study.

(b) Describe the potential for the project to improve flow conditions in a natural stream channel, including description of any specific issues that will be investigated or information that will be developed as part of the Title XVI feasibility study.

(c) Describe the potential for the project to provide water or habitat for Federally listed threatened or endangered species, including description of any specific issues that will be investigated or information that will be developed as part of the Title XVI feasibility study.

6. Legal and Institutional Requirements – 10 Points

Points will be awarded based on the extent to which the proposal demonstrates that the Title XVI feasibility study will address legal or institutional requirements or barriers to implementing a project, including water rights issues and any unresolved issues associated with implementation of a water reclamation and reuse project.

7. Renewable Energy and Energy Efficiency – 10 points

Points will be awarded based on the extent to which the proposal demonstrates that the Title XVI feasibility study will address methods to incorporate the use of renewable energy or will otherwise address energy efficiency aspects of the water reclamation and reuse project being investigated.

8. Watershed Perspective – 10 points

Points will be awarded based on the extent to which the proposal demonstrates that the Title XVI feasibility study will address alternatives that promote and apply a regional or watershed perspective to water resource management.

Total– 100 points