

WaterSMART Basin Study Program **Basin Studies - Selection Process Overview**

Introduction

Basin Studies are part of the WaterSMART Basin Study Program and are a key component of the Bureau of Reclamation's plan for implementing the SECURE Water Act (SWA) (Subtitle F of P.L. 111-11, 123 Stat. 1329). The WaterSMART Program, established by Secretarial Order 3297, addresses an increasing set of water supply challenges, including chronic water supply shortages due to increased population growth, climate variability and change, and heightened competition for finite water supplies. Through the Basin Studies, Reclamation will partner with stakeholders to conduct studies that define options for meeting future water demands in river basins in the West where imbalances in supply and demand exist or are projected. For more information regarding the *WaterSMART Basin Study Program*, please visit our website, at <http://www.usbr.gov/WaterSMART/basin.html>.

This document describes the process for non-Federal entities to propose a Basin Study to Reclamation for consideration, and includes: (1) an overview of the WaterSMART Basin Studies; (2) program requirements (including eligibility); (3) Reclamation's two-step process for selecting proposed studies for funding; (4) how to submit a letter of interest under Step 1 of the selection process; (5) how to submit a study proposal (Proposal) if you are selected to proceed to Step 2 of the selection process; and (6) the selection criteria.

In addition to reviewing the information provided here, we encourage you to contact your regional Reclamation office and to work with a Reclamation staff member who can help you ensure that the proposed study meets the goals of the program.

WaterSMART Basin Studies Overview

The purpose of the Basin Studies is to work with state and local partners in the 17 Western States to evaluate future water supply and demand imbalances, including assessments of the risks and impacts of climate change on water resources, and develop potential mitigation and adaptation strategies to meet future demands.

Basin Studies should specifically include **consideration of the risks and impacts** of climate change enumerated in section 9503(b)(2) and section 9503(b)(3) of the SWA, to the extent applicable. To the extent they are available, information regarding these risks and impacts may be taken from baseline projections developed through West-Wide Climate Risk Assessments (WWCRAs), another activity under the Basin Study Program, or may be developed further as part of the Basin Study as needed.

Basin Studies will include the **development of adaptation and mitigation strategies**. Adaptation strategies could include changes to the operation of water supply systems, water conservation, water reuse and system optimization, modifications to existing facilities, and development of new facilities, among other options. Reclamation and the non-Federal cost-share partners will seek input from other basin stakeholders during the study process. A Basin Study

should be similar in terms of scope and analysis to an appraisal study, and may lead to a SECURE Feasibility Study as authorized by section 9503(d).

Basin Studies will be cost-shared on a 50/50 basis with willing state, tribal, and local partners, and will generally be two years in duration. Basin Studies are not a financial assistance program; therefore, Reclamation's share of the study costs may only be used to support work done by Reclamation or its contractors. In exceptional circumstances, the Commissioner may waive or reduce the non-Federal cost-share requirement if an overwhelming Federal interest and a significant financial need are identified.

Each Basin Study should include four basic components:

- Projections of water supply and demand within the basin, including an assessment of risks to the water supply relating to climate change as defined in section 9503(b)(2) of the SECURE Water Act Act (Subtitle F of Title IX of P.L. 111-11, the Omnibus Public Land Management Act of 2009) ;
- Analysis of how existing water and power infrastructure and operations will perform in the face of changing water realities, such as population increases and climate change, as well as other impacts identified within section 9503(b)(3) of the SECURE Water Act as appropriate;
- Development of appropriate adaptation and mitigation strategies to meet future water demands; and
- A trade-off analysis of the options identified and findings and recommendations as appropriate. This includes an analysis of all proposed alternatives in terms of their relative cost, environmental impact, risk, stakeholder response, or other attributes common to the alternatives.

The Basin Studies will prioritize river basins or sub-basins where water supply and demand imbalances may exist. A river basin can be defined as any topographically distinct watershed of land, aquifers, or streams and rivers that channel water to a single or primary waterway. Projections of water demands may include demands for agricultural, municipal, environmental, recreational water uses, and other uses. Projections of water supply will consider all potential water sources, including both ground and surface water.

The Basin Studies are critical to the Western United States as water resources are impacted by record droughts, population increases, and the impacts of climate change. A more complete description of the Basin Studies and the process for conducting a Basin Study is provided in the document titled *Basin Study Framework*, which is available on the website at <http://www.usbr.gov/WaterSMART/basin.html>. The *Basin Study Framework* may provide helpful background information in completing your letter of interest and is even more relevant if your study is selected to move forward to the proposal stage.

Basin Study Program Requirements

All Basin Studies must meet the following minimum requirements:

- Studies must focus on river basins or sub-basins in the 17 Western States where imbalances in water supply and demand exist or may exist in the future;
- Non-Federal partners must contribute at least 50 percent of the total study costs in non-Federal funding or in-kind contributions (pre-award costs prior to June 1, 2010 will not be considered as part of the non-Federal cost-share);
- Eligible non-Federal cost-share partners include states, tribes, water districts, cities, and other local governmental entities with water delivery or management authority located in the 17 Western States;
- Studies must be conducted in accordance with a memorandum of agreement specific to the particular study. The memorandum of agreement will be developed jointly by Reclamation in cooperation with the non-Federal cost-share partner(s) before work on the study begins;
- FY 2011 studies must be completed within two years of the signing of the memorandum of agreement, but no later than January 2014, unless Reclamation determines that an extension or phasing of the study is warranted (extensions and phasing will be approved only on a case-by-case basis).

More detailed study parameters guiding the actual study process are set forth in the *Basin Study Framework*.

Proposal Selection Process

The President's FY 2011 budget request includes \$3 million proposed for Basin Studies. Reclamation anticipates funding two to four Basin Studies in FY 2011 if \$3 million is available, however all funding will be contingent upon final FY 2011 appropriations.

Reclamation will use the following two-step process to select Basin Studies for funding:

- **Step 1 – Letters of Interest:** Reclamation's regional offices will seek letters of interest from states and major stakeholders throughout the 17 Western States. All non-Federal entities interested in cost-sharing with Reclamation to conduct a Basin Study will be required to prepare and submit a letter of interest to their regional Reclamation office. **The deadline for letters of interest to be submitted to Reclamation is March 16, 2011.** The regional offices will review the letters and notify the non-Federal study proponents whether their study concepts will proceed to Step 2 of the selection process. The requirements for preparing a letter of interest are described below, along with a description of the criteria that the regions will use to evaluate the letters.
- **Step 2 – Study Proposal:** The regional office will work with those selected in Step 1 to develop a short (10 pages maximum) study proposal for consideration by a Reclamation Application Review Committee (ARC). The ARC will be made up of staff from across Reclamation with technical expertise relevant to the Basin Study process.

The ARC will prioritize the proposals based on the selection criteria established in the *Basin Studies Framework*, and listed below, and will make a recommendation to Reclamation's Commissioner regarding which studies to fund in FY 2011. Reclamation's Commissioner will make the final determination regarding the ARC

recommendations. Proposals that meet program requirements but do not rank high enough to receive funding in FY 2011 may be reconsidered in FY 2012 upon request by the non-Federal study proponent(s).

Letter of Interest

If you are interested in participating in a Basin Study, you will need to prepare a brief letter of interest that is **no longer than 3 pages**, describing the proposed study and explaining how it meets the program requirements. This letter should be submitted to your regional Reclamation office at the location listed on the cover letter. Specifically, your letter should describe or identify:

- Cost-share and program eligibility;
- The geographic focus of study;
- The water supply challenges that create or will lead to imbalances in supply and demand;
- The risks to water supplies from changes to snowpack, timing and quantity of runoff, groundwater recharge, and discharge;
- The general scope of the study;
- A preliminary estimate of the dollar value of your cost-share which may include in-kind services;
- The level of stakeholder interest in the study;
- A list of potential cost-share partners; and
- The resources that the non-Federal study partners would make available for the study, including staff, technical expertise, and applicable data and models.

Reclamation will advise you in writing whether or not the proposed study described in your letter will be advanced to Step 2 of the selection process. Reclamation's regional offices will apply the following criteria in reviewing letters of interest:

- Whether the proposed study appears to meet program requirements;
- Whether the proposed Basin Study complements, or adversely complicates similar efforts in the study area;
- The degree to which the study meets Regional priorities; and
- The degree to which the study meets the goals and priorities of the Basin Study Program.

Study Proposal

If your study is selected by Reclamation to proceed to Step 2 of the selection process, staff from the regional Reclamation office will work with you on a collaborative basis to prepare a Proposal. The ARC will use the selection criteria presented on the following page to prioritize studies and recommend funding for FY 2011.

Study Proposal Selection Criteria

1. The extent and consequences of existing or anticipated imbalances in water supply and demand. 33 POINTS

- a) Magnitude and frequency of water shortages (this should be a quantitative evaluation based on percentages of needs not met).
- b) Known and projected demands for all types of water uses (e.g., agricultural, municipal and industrial, Tribal water needs, environmental needs, recreation, and power generation).
- c) Nature of imbalances - water quantity, water quality, or both.
- d) Severity of potential consequences for not addressing imbalances in supply and demand, including impacts to water delivery, hydropower production, recreation, others as defined within section 9503(b)(3).

2. The extent to which Federal involvement is needed due to the nature and complexity of the issues involved. 22 POINTS

This could include multijurisdictional issues, technical capabilities (e.g., Reclamation expertise in hydrology, engineering, or climate models), issues of national significance (i.e., food supply, energy, etc), or other appropriate issues.

3. The existence and quality of data and models available and applicable to the proposed study. 17 POINTS

Data and models could include but are not limited to:

- a) Hydrologic models
- b) Operational models
- c) Climate models
- d) Water demand projections
- e) Water quality data
- f) Recreational water needs
- g) Environmental water needs
- h) Demographics

4. The strength of any nexus between the Basin Study and a Reclamation project or activity (e.g. something that affects a Reclamation project or activity). 15 POINTS

Studies with a stronger nexus to Reclamation will receive a higher score.

5. The level of Stakeholders interest in and support for the Basin Study. 10 POINTS

Is there widespread support for the study in the basin (i.e., support by diverse stakeholders and lack of opposition)?

6. Whether the non-Federal cost-share contribution exceeds the required 50 percent.
3 POINTS

Non-Federal cost-share contributions of greater than 50 percent will result in a higher score.