

COLORADO WATER CONSERVATION BOARD

WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

Today's Date: February 10, 2015



Basalt Water Conservancy District – Roaring Fork Watershed Missouri Heights Groundwater Monitoring Program, Phase IIA

Name of Water Activity/Project

Basalt Water Conservancy District		
Name of Applicant	Amount from Statewide Account:	\$0
Colorado River Basin	Amount from Statewide Account:	Ψ
	Amount from Basin Account(s):	\$25,000
A	Total WSRA Funds Requested:	\$25,000

Approving Basin Roundtable(s)

(If multiple basins specify amounts in parentheses.)

FEIN: 84-1014102

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Required Exhibits

- A. Statement of Work, Budget, and Schedule
- B. Project Map
- C. As Needed (i.e. letters of support, photos, maps, etc.)

Appendices – Reference Material

- 1. Program Information
- 2. Insurance Requirements
- 3. WSRA Standard Contract Information (Required for Projects Over \$100,000)
- 4. W-9 Form (Required for All Projects Prior to Contracting)

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Instructions

To receive funding from the Water Supply Reserve Account (WSRA), a proposed water activity must be approved by the local Basin Roundtable **AND** the Colorado Water Conservation Board (CWCB). The process for Basin Roundtable consideration and approval is outlined in materials in Appendix 1.

Once approved by the local Basin Roundtable, the applicant should submit this application **with a detailed statement of work including budget and schedule as Exhibit A** to CWCB staff by the application deadline.

WSRA applications are due with the roundtable letter of support 60 calendar days prior to the bi-monthly Board meeting at which it will be considered. Board meetings are held in January, March, May, July, September, and November. Meeting details, including scheduled dates, agendas, etc. are posted on the CWCB website at: http://cwcb.state.co.us Applications to the WSRA Basin Account are considered at every board meeting, while applications to the WSRA Statewide Account are only considered at the March and September board meetings.

When completing this application, the applicant should refer to the WSRA Criteria and Guidelines available at: http://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Documents/WSRACriteriaGuidelines.pdf. In addition, the applicant should also refer to the <a href="https://www.supplemental.gov/supplemental.g

The application, statement of work, budget, and schedule **must be submitted in electronic format** (Microsoft Word or text-enabled PDF are preferred) and can be emailed or mailed on a disk to:

Craig Godbout - WSRA Application Colorado Water Conservation Board 1313 Sherman St., Room 721 Denver, CO 80203 Craig.godbout@state.co.us

If you have questions or need additional assistance, please contact Craig Godbout at: 303-866-3441 x3210 or craig.godbout@state.co.us.

not for funding from the Statewide Account.

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Part I	- Description of the App	olicant (P	Project Sponsor or Owner);		
1.	Applicant Name(s):	Basalt Water Conservancy District Don Boyer, President			
	Mailing address:		Box 974 wood Springs, CO 81623		
	FEIN#:	84-10	14102		
	Primary Contact:	Eric M	Mangeot	Position/Title:	District Engineer
	Email:	ericm	@resource-eng.com		
	Phone Numbers:	Cell:	970-618-3632	Office:	970-945-6777
	Alternate Contact:	Don E	Boyer	Position/Title:	President
	Email:	boyer	@sopris.net		
	Phone Numbers:	Cell:	970-927-3442	Office:	N/A
2. Eli	igible entities for WSRA	funds in	clude the following. What ty	ype of entity is the	Applicant?
	Public (Government) – municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities and the local entity should be the grant recipient.				
	Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.				
х	Public (Districts) – autland water activity enter		Title 32/special districts, (con	nservancy, conserv	vation, and irrigation districts),
	Private Incorporated –	mutual d	itch companies, homeowners	s associations, corp	porations.

Private individuals, partnerships, and sole proprietors are eligible for funding from the Basin Accounts but

Non-governmental organizations – broadly defined as any organization that is not part of the government.

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3.

	Provide a brief description of your organization
	Please See Attached Page 14.
4.	If the Contracting Entity is different then the Applicant (Project Sponsor or Owner) please describe the Contracting Entity here.
5.	Successful applicants will have to execute a contract with the CWCB prior to beginning work on the portion of the project funded by the WSRA grant. In order to expedite the contracting process the CWCB has established a standard contract with provisions the applicant must adhere to. A link to this standard contract is included in Appendix 3. Please review this contract and check the appropriate box.
	The Applicant will be able to contract with the CWCB using the Standard Contract
	The Applicant has reviewed the standard contract and has some questions/issues/concerns. Please be aware that any deviation from the standard contract could result in a significant delay between grant approval and the funds being available.
6.	The Tax Payer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect the applicant. None

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Par	t II Desc	ription of the Water Act	tivity/Project
1. V	What is the	primary purpose of this g	rant application? (Please check only one)
		Nonconsumptive (Env	vironmental or Recreational)
		Agricultural	
		Municipal/Industrial	
		Needs Assessment	
		Education	
	X	Other Expla	Groundwater Study
2. I	f you feel th	nis project addresses mult	tiple purposes please explain.
	Ĭ	1 3	
3. I	s this projec	ct primarily a study or im	plementation of a water activity/project? (Please check only one)
	X	Study	Implementation
4. Т	o catalog n	neasurable results achieve	ed with WSRA funds can you provide any of the following numbers?
		New Storage Created	l (acre-feet)
		New Annual Water S	Supplies Developed, Consumptive or Nonconsumptive (acre-feet)
		Existing Storage Pres	served or Enhanced (acre-feet)
		Length of Stream Re	stored or Protected (linear feet)
		Length of Pipe/Canal	l Built or Improved (linear feet)
		Efficiency Savings (a	acre-feet/year OR dollars/year – circle one)
		Area of Restored or I	Preserved Habitat (acres)
		Other Explain:	

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4. To help us map V	VSRA projects please include	a map (Exhibit	B) and provide the general coo	ordinates below:
Latitude:	39.43	Longitude:	-107.12	

5. Please provide an overview/summary of the proposed water activity (no more than one page). Include a description of the overall water activity and specifically what the WSRA funding will be used for. A full **Statement of Work** with a detailed budget and schedule is required as **Exhibit A** of this application.

Please See Attached Page 15.

Part III. - Threshold and Evaluation Criteria

- 1. <u>Describe how</u> the water activity meets these **Threshold Criteria.** (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines.)
 - a) The water activity is consistent with Section 37-75-102 Colorado Revised Statutes.¹
 The Basalt Water Conservancy District (District) is a quasi-government body organized in 1963 under Sections 37-45-101, et seq. C.R.S. This makes the District an eligible entity for grant funding under the terms of Senate Bill 06-179.

The BWCD groundwater study is a nonstructural study of nonconsumptive and consumptive water activities. Therefore, the study will not cause injury to senior water users. This study will assess water availability in order to facilitate, not impair the current system of water allocation.

b) The water activity underwent an evaluation and approval process and was approved by the Basin Roundtable (BRT) and the application includes a description of the results of the BRTs evaluation and approval of the activity. At a minimum, the description must include the level of agreement reached by the roundtable, including any minority opinion(s) if there was not general agreement for the activity. The description must also include reasons why general agreement was not reached (if it was not), including who opposed the activity and why they opposed it. Note- If this information is included in the letter from the roundtable chair simply reference that letter.

See Attached Exhibit C-1.

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¹ 37-75-102. Water rights - protections. (1) It is the policy of the General Assembly that the current system of allocating water within Colorado shall not be superseded, abrogated, or otherwise impaired by this article. Nothing in this article shall be interpreted to repeal or in any manner amend the existing water rights adjudication system. The General Assembly affirms the state constitution's recognition of water rights as a private usufructuary property right, and this article is not intended to restrict the ability of the holder of a water right to use or to dispose of that water right in any manner permitted under Colorado law. (2) The General Assembly affirms the protections for contractual and property rights recognized by the contract and takings protections under the state constitution and related statutes. This article shall not be implemented in any way that would diminish, impair, or cause injury to any property or contractual right created by intergovernmental agreements, contracts, stipulations among parties to water cases, terms and conditions in water decrees, or any other similar document related to the allocation or use of water. This article shall not be construed to supersede, abrogate, or cause injury to vested water rights or decreed conditional water rights. The General Assembly affirms that this article does not impair, limit, or otherwise affect the rights of persons or entities to enter into agreements, contracts, or memoranda of understanding with other persons or entities relating to the appropriation, movement, or use of water under other provisions of law.

The water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes.² The Basin Roundtable Chairs shall include in their approval letters for particular WSRA grant applications a description of how the water activity will assist in meeting the water supply needs identified in the basin roundtable's consumptive and/or non-consumptive needs assessments.

See Attached Exhibit C-1.

d) Matching Requirement: For requests from the **Statewide Fund**, the applicants will be required to demonstrate a **25 percent** (or greater) match of the total grant request from the other sources, including by not limited to Basin Funds. A minimum match of 5% of the total grant amount shall be from Basin funds. A minimum match of 5% of the total grant amount must come from the applicant or 3rd party sources. Sources of matching funds include but are not limited to Basin Funds, in-kind services, funding from other sources, and/or direct cash match. Past expenditures directly related to the project may be considered as matching funds if the expenditures occurred within 9 months of the date the contract or purchase order between the applicant and the State of Colorado is executed. Please describe the source(s) of matching funds. (NOTE: These matching funds should also be reflected in your Detailed Budget in **Exhibit A** of this application)

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² 37-75-104 (2)(c). Using data and information from the Statewide Water Supply Initiative and other appropriate sources and in cooperation with the on-going Statewide Water Supply Initiative, develop a basin-wide consumptive and nonconsumptive water supply needs assessment, conduct an analysis of available unappropriated waters within the basin, and propose projects or methods, both structural and nonstructural, for meeting those needs and utilizing those unappropriated waters where appropriate. Basin Roundtables shall actively seek the input and advice of affected local governments, water providers, and other interested stakeholders and persons in establishing its needs assessment, and shall propose projects or methods for meeting those needs. Recommendations from this assessment shall be forwarded to the Interbasin Compact Committee and other basin roundtables for analysis and consideration after the General Assembly has approved the Interbasin Compact Charter.

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2. For Applications that include a request for funds from the **Statewide Account**, <u>describe how</u> the water activity/project meets all applicable **Evaluation Criteria.** (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines and repeated below.) Projects will be assessed on how well they meet the Evaluation Criteria. **Please attach additional pages as necessary.**

Evaluation Criteria – the following criteria will be utilized to further evaluate the merits of the water activity proposed for funding from the Statewide Account. In evaluation of proposed water activities, preference will be given to projects that meet one or more criteria from each of the three "tiers" or categories. Each "tier" is grouped in level of importance. For instance, projects that meet Tier 1 criteria will outweigh projects that only meet Tier 3 criteria. The applicant should also refer to the Supplemental Scoring Matrix applied to Evaluation Criteria Tiers 1-3 for Statewide Account requests. WSRA grant requests for projects that may qualify for loans through the CWCB loan program will receive preference in the Statewide Evaluation Criteria if the grant request is part of a CWCB loan/WSRA grant package. For these CWCB loan/WSRA grant packages, the applicant must have a CWCB loan/WSRA grant ratio of 1:1 or higher. Preference will be given to those with a higher loan/grant ratio.

<u>Tier 1: Promoting Collaboration/Cooperation and Meeting Water Management Goals and Identified Water Needs</u>

- a. The water activity addresses multiple needs or issues, including consumptive and/or non-consumptive needs, or the needs and issues of multiple interests or multiple basins. This can be demonstrated by obtaining letters of support from other basin roundtables (in addition to an approval letter from the sponsoring basin).
- b. The number and types of entities represented in the application and the degree to which the activity will promote cooperation and collaboration among traditional consumptive water interests and/or non-consumptive interests, and if applicable, the degree to which the water activity is effective in addressing intrabasin or interbasin needs or issues.
- c. The water activity helps implement projects and processes identified as helping meet Colorado's future water needs, and/or addresses the gap areas between available water supply and future need as identified in SWSI or a roundtable's basin-wide water needs assessment.

Tier 2: Facilitating Water Activity Implementation

- d. Funding from this Account will reduce the uncertainty that the water activity will be implemented. For this criterion the applicant should discuss how receiving funding from the Account will make a significant difference in the implementation of the water activity (i.e., how will receiving funding enable the water activity to move forward or the inability obtaining funding elsewhere).
- e. The amount of matching funds provided by the applicant via direct contributions, demonstrable in-kind contributions, and/or other sources demonstrates a significant & appropriate commitment to the project.

Tier 3: The Water Activity Addresses Other Issues of Statewide Value and Maximizes Benefits

- f. The water activity helps sustain agriculture & open space, or meets environmental or recreational needs.
- g. The water activity assists in the administration of compact-entitled waters or addresses problems related to compact entitled waters and compact compliance and the degree to which the activity promotes maximum utilization of state waters.
- h. The water activity assists in the recovery of threatened and endangered wildlife species or Colorado State species of concern.

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- i. The water activity provides a high level of benefit to Colorado in relationship to the amount of funds requested.
- j. The water activity is complimentary to or assists in the implementation of other CWCB programs.

Continued: Explanation of how the water activity/project meets all applicable Evaluation Criteria.

Please attach additional pages as necessary.

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Part IV. - Required Supporting Material

1.	Water Rights, Availability, and Sustainability - This information is needed to assess the viability of the
	water project or activity. Please provide a description of the water supply source to be utilized, or the water
	body to be affected by, the water activity. This should include a description of applicable water rights, and
	water rights issues, and the name/location of water bodies affected by the water activity.

See Attached Page 16.

2. Please provide a brief narrative of any related studies or permitting issues.

See Attached Page 17.

3. Statement of Work, Detailed Budget, and Project Schedule

The statement of work will form the basis for the contract between the Applicant and the State of Colorado. In short, the Applicant is agreeing to undertake the work for the compensation outlined in the statement of work and budget, and in return, the State of Colorado is receiving the deliverables/products specified. **Please note that costs incurred prior to execution of a contract or purchase order are not subject to reimbursement**. All WSRA funds are disbursed on a reimbursement basis after review invoices and appropriate backup material.

Please provide a detailed statement of work using the template in Exhibit A. Additional sections or modifications may be included as necessary. Please define all acronyms and include page numbers.

REPORTING AND FINAL DELIVERABLE

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the statement of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

PAYMENT

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 10 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and help promote the development of a common technical platform.

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The above statements are true to the best of my knowledge: Don Bayar 2/10/15

Signature of Applicant:

Print Applicant's Name: Don Boyer, President, Basalt Water Conservancy District

Project Title: Missouri Heights Groundwater Monitoring Program, Phase IIA

Date: February 10, 2015

Return an electronic version (hardcopy may also be submitted) of this application to:

Craig Godbout – WSRA Application Colorado Water Conservation Board 1313 Sherman St., Room 721 Denver, CO 80203 303-866-3441, ext. 3210 (office) 303-547-8061 (cell) craig.godbout@state.co.us

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Application Question Part I.3 Brief Summary of Organization

Organization Name: Basalt Water Conservancy District (BWCD)

Mailing Address: c/o Resource Engineering, Inc.

909 Colorado Avenue

Glenwood Springs, CO 81601

Director and Contact Person: Don Boyer, President

Phone: 970-927-3442 E-Mail: boyer@sopris.net

The Basalt Water Conservancy District (District) is both the sponsoring agency and the official applicant for this grant. The District is a quasi-governmental body organized in 1963 under Section 37-45-101, et seq. C.R.S. This makes the District an eligible entity for grant funding under the terms of Senate Bill 06-179. The District is governed by an eight member Board of Directors. Directors are appointed by the sitting Board and represent 7 geographical divisions within the District's boundary. The Board of Directors holds monthly meetings that are fully noticed, open to the public, and carried out in accordance with State sunshine laws and other applicable regulations. The District receives part time administrative support along with technical assistance from Resource Engineering, Inc., legal counsel from Balcomb and Green, PC and accounting and financial oversight from Barnes, Pearson, and Associates, LLC. The District is funded by a mill levy assessed on property owners within the District's boundary and fees assessed on water allotment contracts. Its annual operating budget is approximately \$400,000.

The District was created for the purposes of conserving, developing, and stabilizing water supplies for the benefit of users within the Roaring Fork Valley. Today, the District operates a comprehensive water supply plan that provides over 500 domestic, agricultural, and commercial contractees with dependable legal water supplies. **Exhibit C** provides a map of the District's water service area boundary. The District's water rights are used to benefit its contractees, by allowing them to continue to divert water at their well, spring, or surface diversion in times of shortage when their use would otherwise be curtailed. The District owns substantial domestic, municipal, and agricultural direct flow water rights, and maintains several reservoir storage contracts with the US Bureau of Reclamation for the release of water from Ruedi and Green Mountain Reservoirs. The District sponsors several water related activities in addition to the water supply program. This includes providing funding and support for local water education, water-related agricultural improvements, and water supply studies.

Application Question Part II.5 Project Overview/Summary

The Basalt Water Conservancy District (District) was created to help provide a stable water supply to junior water users in the Roaring Fork Valley. The District owns domestic, municipal and agricultural water rights; it also holds reservoir storage contracts with the U.S. Bureau of Reclamation. Persons, or groups, interested in pursuing a stable, legal junior water supply can apply for a contract with the District. The District uses its water rights, and releases from its reservoir contracts, to augment depletions associated with its contractees. The District supplies augmentation water for a number of contracts located on Missouri Heights. Expanding development on Missouri Heights has led to increased groundwater withdrawals and new demand for District water allotment contracts. Augmentation releases for Missouri Heights' well contracts present a unique augmentation situation. The wells deplete the Missouri Heights aquifer, but the augmentation releases do not provide direct, physical recharge to the aquifer. The lack of direct recharge has raised concerns that Missouri Heights contracts will deplete the local aquifer. Missouri Heights groundwater is tributary to Cattle Creek, the Roaring Fork River, and ultimately the Colorado River.

In order to monitor the effects of well withdrawals on the aquifer, the District implemented Phase I of the Missouri Heights Groundwater Monitoring Program in 1982. Phase I monitored water levels at three wells and four springs in the vicinity of Missouri Heights. A monthly, instantaneous measurement was taken at each of the seven sites. The frequency of data collection provided the basis for a reconnaissance level assessment of fluctuations in groundwater levels and their relationship to climatic trends, increased development, and changing land use patterns.

Phase II of the Groundwater Monitoring Program addressed the limitations of Phase I and provided a more detailed understanding of the influences of development on the Missouri Heights aquifer. In order to accomplish this, the District established 6 monitoring well sites equipped with continuous recording devices. The District also installed a remote precipitation gage on Missouri Heights. Data was collected at these sites for a period of five years. At the end of the five year study period the data was analyzed and summarized in a report by RESOURCE in April 2014. In addition, water quality samples were taken at the beginning and end of Phase II. The water quality data remained consistent during Phase II and showed no evidence of an increasing or decreasing trend. Therefore, no water sampling is planned in Phase IIA.

In order to continue the monitoring program the District would like to implement Phase IIA. Phase IIA will provide a better understanding of the influences of development on the Missouri Heights aquifer by verifying the trends and conclusions established in Phase II. The groundwater levels will be monitored continually at the existing six well sites and an additional site(s). The local weather patterns will continue to be monitored with the previously installed weather station. In addition, the District plans to investigate the amount of recharge the aquifer receives. This task may be difficult due to the imported irrigation water from Cattle Creek and lack of runoff data from Missouri Heights. However, the feasibility of studying recharge will be assessed as part of Task 3.

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Application Question Part IV.1 Water Rights, Availability, and Sustainability

Missouri Heights is located on a broad mesa above the Roaring Fork River, near Carbondale, Colorado. Historically, water use on Missouri Heights has been primarily for agricultural use, including irrigation and stock watering. A rise in housing density associated with subdividing historic ranches has led to increased water demand. This demand has been met by reallocating historic supply sources and developing new wells, thereby increasing groundwater withdrawals. The increased groundwater withdrawals have primarily been used for domestic purposes, including lawn and garden irrigation. New water rights applications for Junior wells on Missouri Heights have proved to be very contentious. Owners of existing, Senior water rights are concerned that new wells will deplete the groundwater table.

Groundwater withdrawals from Missouri Heights influence several water supply sources. A small portion of Missouri Heights groundwater and surface water is tributary to Cattle Creek, a tributary of the Roaring Fork River. While Cattle Creek is a healthy, perennial stream, it has been the subject of extensive development and is considered over-appropriated by the Division Engineer. Remaining groundwater and surface water on Missouri Heights is directly tributary to the Roaring Fork River. Similar to Cattle Creek, the Roaring Fork River is extensively developed and considered over-appropriated. Junior groundwater rights appropriated in the Missouri Heights aquifer and tributary to either of these basins must be fully augmented. New water rights are subject to local administrative calls and regional administrative calls from the Cameo Water Rights on the Lower Colorado River.

Phase IIA of the Groundwater Monitoring Program will assess the physical availability of water in the Missouri Heights aquifer. Additionally, Phase IIA will help further evaluate the ability of the aquifer to sustain continued groundwater development. The updated Phase IIA report will provide a sound technical basis for evaluating how new appropriations may influence vested, Senior water rights in the Missouri Heights aquifer, Cattle Creek, the Roaring Fork River, and the Colorado River. The report may be used by existing water rights holders, new water right holders, and the Division of Water Resources.

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Application Question Part IV.2 Related Studies

Missouri Heights Groundwater Monitoring Program – Phase I: This study evaluated groundwater data collected on Missouri Heights since 1982. The data indicated that Missouri Heights groundwater levels were not being significantly depleted by increased water demand. Furthermore, the Study found that the aquifer's water level was heavily influenced by climatic patterns (dry, average, and wet years) and transbasin importation of irrigation water. However, Phase I also identified several limitations with the data and sampling methodology that prevented drawing more detailed conclusions about Missouri Heights groundwater behavior.

Missouri Heights Groundwater Monitoring Program - Phase II

Phase II of the Groundwater Monitoring Program addressed the limitations of Phase I and developed a better understanding of the Missouri Heights aquifer. The Phase II monitoring program operated from 2008 through 2013. Phase II confirmed that imports from Cattle Creek play a vital role in maintaining the water levels in the aquifer. Depending upon the location in the Study Area, Phase II concluded that groundwater levels are primarily influenced by either precipitation, irrigation diversions, or both. Phase II also confirmed that groundwater levels did not experience a downward decline in response to development, but closely mimic precipitation and irrigation diversion trends.