

AGENDA ITEM SUMMARY

DATE: 3-18-13

DEPARTMENT: Legal

DEPT. HEAD SIGNATURE: _____

SUBJECT:

Consideration of Contract for Services with SIRCOMM and Resolution No. 2013-15 and consideration of Intergovernmental Agreement between the Cities of Hailey, Bellevue and Sun Valley and Resolution No. 2013-16

AUTHORITY: ID Code _____ IAR _____ City Ordinance/Code _____
(IF APPLICABLE)

BACKGROUND/SUMMARY OF ALTERNATIVES CONSIDERED:

At your last meeting on March 11, 2013, the mayor and council requested quotes for various capital and miscellaneous expenses described in the SIRCOMM contract. The Hailey Chief of Police provided me with the following estimates:

Repeater	\$9,000.00
Parts and installation	3,000.00
Shipping	<u>101.00</u>
Total onetime cost	\$12,101.00

14 radio's re-programmed 14 radio's x\$20.00 = \$280.00

Recurring cost: Baldy repeater tower \$1850.00 per year

Under the Intergovernmental Agreement, Hailey would be responsible for 51% of \$12,101, or \$6,171.51 and 51% of the tower lease, or \$943.50. But, Hailey would be solely responsible for the radios, as would the other cities. A question was also raised whether Hailey's insurance costs would be affected. According to ICRMP, our insurance premiums will not be affected. Our costs for non-911 services will be 51% of \$175,000.00, or \$89,250.00. Therefore, our cost for non-911 services will decrease from the present Blaine County charge of \$145,649.00 to \$89,250.00, which represents a decrease of 38.7%.

Ned

<u>FISCAL IMPACT / PROJECT FINANCIAL ANALYSIS</u>		Caselle # _____
Budget Line Item # _____		YTD Line Item Balance \$ _____
Estimated Hours Spent to Date: _____		Estimated Completion Date: _____
Staff Contact: _____		Phone # _____
Comments: _____		

ACKNOWLEDGEMENT BY OTHER AFFECTED CITY DEPARTMENTS: (IF APPLICABLE)

___ City Attorney	___ Clerk / Finance Director	___ Engineer	___ Building
___ Library	___ Planning	___ Fire Dept.	_____
___ Safety Committee	___ P & Z Commission	___ Police	_____
___ Streets	___ Public Works, Parks	___ Mayor	_____

RECOMMENDATION FROM APPLICABLE DEPARTMENT HEAD:

Discuss the proposed contracts and if satisfactory, make a motion to approve and authorize the mayor to sign the contracts and Resolution Nos. 2013-15 and 2013-16.

FOLLOW-UP REMARKS:

**CITY OF HAILEY
RESOLUTION NO. 2013-15**

**RESOLUTION OF THE CITY COUNCIL FOR THE CITY OF HAILEY
AUTHORIZING THE EXECUTION OF A CONTRACT FOR SERVICES WITH
SOUTHERN IDAHO REGIONAL COMMUNICATIONS CENTER (SIRCOMM)**

WHEREAS, the City of Hailey desires to enter into an agreement, by and between Southern Idaho Regional Communications Center (SIRCOMM) and the Cities of Hailey, Bellevue and SunValley.

WHEREAS, the SIRCOMM agrees to provide non-emergency communications services to Cities in the manner set forth in the attached agreement.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HAILEY, IDAHO, that the City of Hailey approves the Contract for Services between the City of Hailey and SIRCOMM. and that the Mayor is authorized to execute the attached Agreement,

Passed this 18th day of March, 2013.

City of Hailey

Fritz X. Haemmerle, Mayor

ATTEST:

Mary Cone, City Clerk

CONTRACT FOR SERVICES

This AGREEMENT is made and entered into as of the date of the last signature of the parties below ("Effective Date") by and between Southern Idaho Regional Communications Center ("SIRCOMM") and the Cities of Hailey, Bellevue and Sun Valley (individually referred to as "City" and collectively referred to as "Cities"). Notwithstanding the Effective Date, the parties agree that this contract shall be deemed to commence on October 1, 2013.

RECITALS

- A. SIRCOMM is a separate legal entity created by the counties of Twin Falls, Jerome, Gooding and Lincoln pursuant to Idaho Code § 67-2328 and is authorized to enter into this agreement under its Joint Powers Agreement;
- B. SIRCOMM operates a consolidated emergency communications system for various fire protection, emergency medical and law enforcement agencies within the Counties of Twin Falls, Jerome, Gooding and Lincoln;
- C. Each City is a municipal corporation possessing all powers granted to municipalities under the applicable provisions of the Idaho Code, including the power to enter into this Agreement;
- D. The Cities have requested SIRCOMM to provide a proposal for dispatch services and SIRCOMM has submitted a proposal to provide dispatch services to the Cities; and
- E. Subject to the terms and conditions of this Agreement, the parties wish to enter into this Agreement to provide dispatch services.

AGREEMENT

NOW, THEREFORE, IN CONSIDERATION of the above recitals which are incorporated below, and of the mutual covenants and agreements herein contained and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Services: SIRCOMM agrees to provide non-emergency communications services to Cities in the manner set forth in this Agreement, which include:
 - a. Provide a local non-emergency phone number routed directly to SIRCOMM.
 - b. Answer all non-emergency phone calls.
 - c. Record and maintain phone and radio communications for the Cities using the current logging system. These recordings will be available to the Cities by requesting such recordings *pursuant to an* audio request form.
 - d. Dispatch the appropriate agency *of the* City to calls for service.

- e. Provide general dispatch assistance to agencies of the Cities in all non-emergency events, such as traffic stops and citizen contacts.
- f. Answer calls for the various public works departments for each City and make after hours contact as needed.
- g. Provide online access to SIRCOMM Web Reporting (access to event chronologies).
- h. Provide National Crime Information Center ("NCIC") and Idaho Public Safety and Security Information System ("ILETS") checks for Cities that possess current agreements for NCIC or ILETS access and use.
- i. Provide one Communications Dispatcher per twelve hour shift to provide coverage for the Cities.
- j. Provide other Communications Dispatchers to assist as needed.
- k. Maintain Calls-for-Service ("CFS") separate from those of the agencies currently served by SIRCOMM.
- l. Meet monthly with agency heads of each City as needed.
- m. Maintain and provide CFS data by day, week, or month as needed.
- n. Provide CFS data to each City upon request.
- o. Maintain a list of emergency contact numbers for businesses in each City, as provided by the Cities.
- p. Maintain a database of call history by address or business name.
- q. Provide access to regional database of traffic stops and contacts.
- r. Provide assistance in locating a calling party based on Geographic Information System ("GIS") data if current data is available from the agencies in the Cities. If necessary, a canned map may be used.
- s. Provide observation time for officers.
- t. Assist in radio communication training for new officers.

2. MDT Controllers. SIRCOMM shall provide agencies within the Cities access to the Mobile Data Terminal ("MDT") System maintained by SIRCOMM, provided that each City is solely responsible for the purchase of the equipment, software, and the connectivity required, at its sole cost and expense as set forth in Section 3. With MDT access, officers in the field from an agency within a City will have the ability to run NCIC/ILETS checks and to obtain information for a CFS which access and availability shall be subject to the terms of this Agreement. Data from other agencies served by SIRCOMM and messaging between officers and dispatch would also be available on the MDT.

3. Cities' Obligations. The Cities are obligated, at their own expense, to obtain an 800 MHz frequency; to purchase (as necessary) radio equipment, repeater, antenna, laptops and compatible software for the MDT system; and pay any costs associated with their installation. The Cities shall be responsible for obtaining all approvals, submitting to SIRCOMM all required information and documentation, and complying with all legal requirements necessary to access the MDT System and utilize its available information.

4. Consideration. Cities collectively agree to pay SIRCOMM One Hundred Seventy Five Thousand Dollars (\$175,000.00) for the services outlined in this Agreement during the first term of this Agreement. Payment for the services shall be paid to SIRCOMM quarterly in equal

installments on the first day of each quarter during the term as provided herein. The City of Hailey shall be responsible and submit payment for 51% of the total amount due each quarter; the City of Sun Valley shall be responsible and submit payment for 39.6% of the total amount due each quarter; and the City of Bellevue shall be responsible and submit payment for 9.4% of the total amount due each quarter.

5. Term: The term of this Agreement shall be for twelve (12) months and shall commence on October 1, 2013 ("Commencement Date").

This Agreement will terminate and expire on September 30, 2014 at 11:59 p.m. unless the parties agree to renew this Agreement in writing. The parties agree to negotiate in good faith in the event a party requests any changes to the terms of this Agreement to be effective in a new term. In the event there is a court order declaring that all or a part of the Agreement is illegal or that the Agreement violates Idaho law, either party may exercise the right to terminate this Agreement upon written notice provided to the other party, in which case the Agreement is null and void and performance by the parties under the Agreement shall terminate effective thirty (30) days after the notice.

In the event this Agreement is terminated based upon a court decision as set forth in this section, Cities agree to reimburse SIRCOMM Thirty-Five Thousand Forty-One Dollars (\$35,041.00) for the costs and expenses incurred in hiring and training dispatchers to provide the services set forth in this Agreement.

6. Mutual Indemnification, Hold Harmless and Duty to Defend: SIRCOMM hereby covenants and agrees to indemnify, defend and hold the Cities harmless from and against any and all claims, demands, causes of action, suits, losses, liabilities, damages, costs and expenses, including attorney fees, that may accrue, directly or indirectly, by reason of any wrongful act or omission on the part of SIRCOMM, its agents or employees, related to damages or bodily injury, property damage, personal injury and death that arise out of SIRCOMM's actions or omissions associated with the dispatch services or duties described in this Agreement. SIRCOMM shall have the duty to tender the defense without cost or expense to the Cities if the claim is solely related to the actions of SIRCOMM.

The Cities hereby covenant and agree to indemnify, defend and hold SIRCOMM harmless from and against any and all claims, demands, causes of action, suits, losses, liabilities, damages, costs and expenses, including attorney fees, that may accrue, directly or indirectly, by reason of any wrongful act or omission on the part of the Cities, its agents or employees, related to damages or bodily injury, property damage, personal injury and death that arise out of the Cities' actions or omissions associated with the dispatch services or its law enforcement or governmental duties and actions or duties described in this Agreement, or by reason of lawsuit seeking injunctive relief or damages by Blaine County related to the authority of the City to enter into this Agreement. The Cities shall have the duty to tender the defense without cost or expense to SIRCOMM if the claim is solely related to the actions of the City.

7. Insurance Requirements. SIRCOMM shall maintain in full force and effect, at its sole cost and expense, during the term of this Agreement, comprehensive general liability

insurance for the purpose of protecting the Cities against liability for loss or damage, for bodily injury, property damage, personal injury, death, civil rights violations, and errors and omissions, relating to the acts of SIRCOMM under this Agreement. Such policy shall provide insurance against property damage in an amount not less than \$500,000.00 and bodily injury with limits of not less than \$500,000.00 per each occurrence; provided, however, the minimum limits of insurance as set forth herein shall be automatically increased at any time the liability limits of each City are increased pursuant to the Idaho Tort Claims Act (*Idaho Code Sections 6-901, et seq.*). Such insurance shall be noncancellable except upon thirty (30) days prior written notice to the Cities. SIRCOMM shall also secure and maintain at least the statutory amounts of worker's compensation, disability benefits, and unemployment insurance in accordance with the laws of the State of Idaho. Such insurance shall provide at least thirty (30) days written notice to each City before such policy is suspended, canceled, amended or terminated. SIRCOMM shall provide evidence of acceptable insurance at limits listed above to City Clerk of each City.

The Cities shall maintain in full force and effect, at their sole costs and expense, during the term of this Agreement, comprehensive general liability insurance for the purpose of protecting SIRCOMM against liability for loss or damage, for bodily injury, property damage, personal injury, death, civil rights violations, and errors and omissions, relating to the acts of the Cities under this Agreement. Such policy shall provide insurance against property damage in an amount not less than \$500,000.00 and bodily injury with limits of not less than \$500,000.00 for each occurrence; provided, however, the minimum limits of insurance as set forth herein shall be automatically increased at any time the liability limits of each City are increased pursuant to the Idaho Tort Claims Act (*Idaho Code Sections 6-901, et seq.*). Such insurance shall be noncancellable except upon thirty (30) days prior written notice to SIRCOMM. The Cities shall also secure and maintain at least the statutory amount of worker's compensation, disability benefits, and unemployment insurance in accordance with the laws of the State of Idaho. Such insurance shall provide at least thirty (30) days written notice to SIRCOMM before such policy is suspended, canceled, amended or terminated. The Cities shall provide evidence of acceptable insurance at limits listed above to SIRCOMM.

8. Notices All notices, demands and communications hereunder shall be in writing, and shall be served or given either in person or by certified or registered mail, addressed as follows:

City of Hailey
115 Main Street South, Suite H
Hailey, Idaho 83333

City of Bellevue
P.O. Box 825
Bellevue, Idaho 83313

City of Sun Valley
P.O. Box 416
Sun Valley, Idaho 83353

SIRCOMM
c/o John Moore
P.O. Box 504
911 E. Avenue H
Jerome, Idaho 83338

Any notice given hereunder by mail shall be deemed delivered when received.

9. Miscellaneous Provisions.

a. Waiver. The waiver by either party of the breach of any provision of this Agreement by the other party shall not operate or be construed as a waiver of any subsequent breach.

b. Assignment. Except as otherwise provided within this Agreement, neither party hereto may transfer or assign this Agreement without prior written consent of the other party.

c. Law Governing. This Agreement shall be governed by and construed in accordance with the laws of the State of Idaho.

a. Attorney's Fees. In the event of any dispute with regard to the interpretation or enforcement of this Agreement, the prevailing party shall be entitled to recover its reasonable costs and attorneys' fees incurred therein, whether or not a lawsuit is actually filed, and on any appeals, and in any bankruptcy proceeding.

e. Presumption. This Agreement or any section thereof shall not be construed against any party due to the fact that said Agreement or any section thereof was drafted by said party.

f. Entire Agreement. This Agreement contains the entire understanding between and among the parties and supersedes any prior understandings and agreements among them respecting the subject matter of this Agreement.

g. Agreement Binding. This Agreement shall be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

h. Further Action. The parties hereto shall execute and deliver all documents, provide all information and take or forbear from all such action as may be necessary or appropriate to achieve the purposes of this Agreement.

i. Good Faith, Cooperation and Due Diligence. The parties hereto covenant, warrant and represent to each other good faith, complete cooperation, due diligence and honesty in fact in the performance of all obligations of the parties

pursuant to this Agreement. All promises and covenants are mutual and dependent.

j. Counterparts. This Agreement may be executed in several counterparts and all so executed shall constitute one Agreement, binding on all the parties hereto even though all the parties are not signatories to the original or the same counterpart.

k. Facsimile. Facsimile transmission of any signed original document and retransmission of any signed facsimile transmission shall be same as delivery of the original.

l. Parties in Interest. Nothing herein shall be construed to be to the benefit of any third party, nor is it intended that any provision shall be for the benefit of any third party.

m. Remedies. The rights and remedies provided by this Agreement are cumulative and the use of any one right or remedy by any party shall not preclude nor waive its rights to use any or all other remedies. Any rights provided to the parties under this Agreement are given in addition to any other rights the parties may have by law, statute, ordinance or otherwise.

n. Severability. Every provision of this Agreement is intended to be severable. If any term or provision hereof is illegal or invalid for any reason whatsoever, such illegality or invalidity shall not affect the validity of the remainder of the Agreement.

o. Authority. Each signatory agrees that he or she has full authority and consent to sign this Agreement.

p. Amendment. This Agreement may be revised, amended, or canceled in whole or in part, only by means of a written instrument executed by both parties hereto.

EXECUTED and effective as of the Effective Date provided herein.

“SIRCOMM”

By _____
Tom Faulkner, Gooding County Commissioner
Board Member

By _____
Charles Howell, Jerome County Commissioner
Board Member

By _____
Cresley McConnell, Lincoln County
Commissioner
Board Member

By _____
Leon Mills, Twin Falls County Commissioner
Board Member

“CITIES”

“CITY OF HAILEY”

By _____
Fritz X. Haemmerle, Mayor

ATTEST:

Mary Cone, Hailey City Clerk

“CITY OF BELLEVUE”

By _____
Christopher Koch, Mayor

ATTEST:

Dorothy Barton, Bellevue City Clerk

“CITY OF SUN VALLEY”

By _____
Dewayne Briscoe, Mayor

ATTEST:

Hannah Stauts, Sun Valley City Clerk

**CITY OF HAILEY
RESOLUTION NO. 2013-16**

**RESOLUTION OF THE CITY COUNCIL FOR THE CITY OF HAILEY
AUTHORIZING THE EXECUTION OF AN INTERGOVERNMENTAL AGREEMENT
WITH THE CITY OF BELLEVUE AND THE CITY OF SUN VALLEY**

WHEREAS, the City of Hailey desires to enter into an intergovernmental agreement with the City of Bellevue and the City of Sun Valley.

WHEREAS, the agreement will allow the three (3) cities to enter into a contract for services with SIRCOMM to provide non-emergency communications services and the allocation for the contract as outlined in the attached agreement.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HAILEY, IDAHO, that the City of Hailey approves the Intergovernmental Agreement with the City of Bellevue and the City of Sun and that the Mayor is authorized to execute the attached Agreement,

Passed this 18th day of March, 2013.

City of Hailey

Fritz X. Haemmerle, Mayor

ATTEST:

Mary Cone, City Clerk

INTERGOVERNMENTAL AGREEMENT

(Non-911 Dispatch)

This Intergovernmental Agreement ("Agreement") is made this ____ day of March, 2013, by and between **CITY OF BELLEVUE**, a municipal corporation ("Bellevue"), **CITY OF HAILEY**, a municipal corporation ("Hailey"), and **CITY OF SUN VALLEY**, a municipal corporation ("Sun Valley"), (collectively referred to as "Cities" and individually referred to as "City").

RECITALS

A. Bellevue is a political subdivision of the State of Idaho. Christopher Koch is the duly elected and acting mayor of the City of Bellevue, and has been duly authorized to execute this Agreement.

B. Hailey is a political subdivision of the State of Idaho. Fritz X. Haemmerle is the duly elected and acting mayor of the City of Hailey, and has been duly authorized to execute this Agreement.

C. Sun Valley is a political subdivision of the State of Idaho. Dewayne Briscoe is the duly elected and acting mayor of the City of Sun Valley, and has been duly authorized to execute this Agreement.

D. Pursuant to Idaho Code §67-2332, a municipality is authorized to enter into a contract with one or more municipalities to perform any governmental service, activity or undertaking which each entity is authorized by law to perform including joint contracting for services. Furthermore, Idaho Code § 50-301 grants an Idaho municipality the power to contract.

E. The Cities have determined that they are able to contract for non-911 dispatch services at considerably less cost than the costs charged by Blaine County for comparable services.

F. Concurrent with this Agreement, the Cities have entered into a Contract for Services with the Southern Idaho Regional Communications Center ("SIRCOMM") to provide non-911 dispatch services beginning October 1, 2013.

G. Subject to the terms and conditions of this Agreement, the Cities wish to memorialize an allocation of the costs charged by SIRCOMM according to the terms of the Contract for Services.

AGREEMENT

NOW, THEREFORE, based good and valuable consideration, the receipt of which is hereby acknowledged, and upon the foregoing recitals which are incorporated in this Agreement below as though set forth in full, the parties agree, as follows:

INTERGOVERNMENTAL AGREEMENT/1

1. Allocation of SIRCOMM Contract Costs. As described in paragraph 4 of the Contract for Services, Bellevue shall pay 9.4%, Hailey shall pay 51% and Sun Valley shall pay 39.6% of the total amount due SIRCOMM on or before October 1, 2013, January 1, 2014, April 1, 2014, and July 1, 2014.

2. Allocation of Termination Costs. As described in paragraph 5 of the Contract for Services, Bellevue shall pay 9.4%, Hailey shall pay 51% and Sun Valley shall pay 39.6% of the costs associated with termination of the Contract for Services, if any, within thirty (30) days after the effective date of any termination.

3. Allocation of Capital and Related Costs. As described in paragraph 3 of the Contract for Services, Bellevue shall pay 9.4%, Hailey shall pay 51% and Sun Valley shall pay 39.6% of the capital and associated costs within thirty (30) days after receipt of an invoice.

4. Allocation of MDT Costs. Each City shall be solely responsible for the costs associated with the purchase and maintenance of any mobile data terminal used by that City, as described in paragraph 2 of the Contract for Services.

5. Term. The term of this Agreement shall be one (1) year, commencing September 1, 2013, and expiring September 30, 2014 ("Original Term"), and shall automatically renew for successive one (1) year periods ("Renewal Term") thereafter, unless one or more parties notify the other parties of an intent to terminate on or before June 1 immediately preceding the expiration of the Original Term or Renewal Term, as the case may be.

6. Miscellaneous Provisions.

a) Final Agreement. This Agreement represents the final agreement between the parties and merges and supersedes all prior negotiations, whether written or oral, with respect thereto.

b) Modification. This Agreement cannot be modified, changed, discharged, or terminated, except by writing signed by the Cities.

c) Time is of the Essence. Time and timely performance is of the essence of this Agreement.

d) Applicable Law. This Agreement shall be construed and enforced under the laws of the State of Idaho.

e) Presumption. This Agreement or any section thereof shall not be construed against any party due to the fact that said Agreement or any section thereof was drafted by either party.

f) Further Action. The parties hereto shall execute and deliver all documents, provide all information and take or forbear from all such action as may be necessary or appropriate to achieve the purposes of this Agreement.

g) Authority. Each signatory has full authority and consent to sign this Agreement.

h) Severability. The invalidity or illegality of any provision shall not affect the remainder of this Agreement.

IN WITNESS WHEREOF, the parties, having been duly authorized, have hereunto caused this Intergovernmental Agreement to be executed, on the day and year first above written, the same being done after public hearing, notice and statutory requirements having been fulfilled.

BELLEVUE:

CITY OF BELLEVUE, an Idaho municipal corporation

ATTEST:

By: _____
Dorothy Barton, City Clerk

By: _____
Chris Koch, Mayor

HAILEY:

CITY OF HAILEY, an Idaho municipal corporation

ATTEST:

By: _____
Mary Cone, City Clerk

By: _____
Fritz X. Haemmerle, Mayor

SUN VALLEY:

CITY OF SUN VALLEY, an Idaho municipal corporation

ATTEST:

By: _____
Hannah Stauts, City Clerk

By: _____
Dewayne Briscoe, Mayor

AGENDA ITEM SUMMARY

DATE: 3/18/13 DEPARTMENT: PW - Water DEPT. HEAD SIGNATURE: *[Signature]*

SUBJECT: Discussion of USGS/IDWR Groundwater Flow Modeling Project and public meeting scheduled March 19, 2013

AUTHORITY: ID Code _____ IAR _____ City Ordinance/Code _____
(IF APPLICABLE)

BACKGROUND/SUMMARY OF ALTERNATIVES CONSIDERED:

See attached memo and fact sheet.

FISCAL IMPACT / PROJECT FINANCIAL ANALYSIS: Caselle # _____
Budget Line Item # _____ YTD Line Item Balance \$ _____
Estimated Hours Spent to Date: _____ Estimated Completion Date: _____
Staff Contact: _____ Phone # _____
Comments: _____

ACKNOWLEDGEMENT BY OTHER AFFECTED CITY DEPARTMENTS: (IF APPLICABLE)

- | | | |
|---|--|---|
| <input type="checkbox"/> City Administrator | <input type="checkbox"/> Library | <input type="checkbox"/> Benefits Committee |
| <input type="checkbox"/> City Attorney | <input type="checkbox"/> Mayor | <input type="checkbox"/> Streets |
| <input type="checkbox"/> City Clerk | <input type="checkbox"/> Planning | <input type="checkbox"/> Treasurer |
| <input type="checkbox"/> Building | <input type="checkbox"/> Police | _____ |
| <input type="checkbox"/> Engineer | <input type="checkbox"/> Public Works, Parks | _____ |
| <input type="checkbox"/> Fire Dept. | <input type="checkbox"/> P & Z Commission | _____ |

RECOMMENDATION FROM APPLICABLE DEPARTMENT HEAD:

ADMINISTRATIVE COMMENTS/APPROVAL:

City Administrator _____ Dept. Head Attend Meeting (circle one) Yes No

ACTION OF THE CITY COUNCIL:

Date _____

City Clerk _____

FOLLOW-UP:


*Ord./Res./Agrmt./Order Originals: Record
Copies (all info.): _____
Instrument # _____

*Additional/Exceptional Originals to: _____
Copies (AIS only)

Public Works Memo

To: Mayor Fritz Haemmerle
City Council Members

CC: Heather Dawson, City Administrator

From: Tom Hellen, Public Works Director/City Engineer 

Date: March 18, 2013

Re: Groundwater-Flow Model Meeting

Since 2004 we have been participating in funding ongoing USGS studies of the Wood River Valley aquifer to better understand the groundwater system. The U. S. Geological Survey (USGS) and the Idaho Department of Water Resources (IDWR) will now be collaborating on a project to construct a groundwater-flow model for the Wood River Valley aquifer system. This project will begin this year with an anticipated completion in 2015. This model, coupled with the establishment of a Groundwater Measurement District last year, are the two primary steps toward Conjunctive Management of surface and groundwater rights in the Wood River Valley.

Given the importance of this to our city's water rights and continued irrigation of city and private property once conjunctive management becomes a reality we need to be intimately involved in all phases of this project with the assistance of technical expertise. I will be attending a meeting on March 19 at 6:30 pm at the Wood River High School along with water rights attorney Michael Creamer and Christian Petrich of SPF Water Engineering. I recommend retaining these experts to assist us with understanding the groundwater model and possible implications of conjunctive management.

While there will be a variety of ways to protect our water rights they will likely require additional funding as we move forward. Mayor Haemmerle may wish to add his expertise and thoughts to this subject at the council meeting. A copy of the Fact Sheet for the study is attached.

Groundwater Resources of the Wood River Valley, Idaho: A Groundwater-Flow Model for Resource Management

The U.S. Geological Survey (USGS), in collaboration with the Idaho Department of Water Resources (IDWR), will use the current understanding of the Wood River Valley aquifer system to construct a MODFLOW numerical groundwater-flow model to simulate potential anthropogenic and climatic effects on groundwater and surface-water resources. This model will serve as a tool for water rights administration and water-resource management and planning. The study will be conducted over a 3-year period from late 2012 until model and report completion in 2015.

The Wood River Valley

The population of Blaine County in south-central Idaho has nearly quadrupled from 1970 to 2010; most of the growth has occurred in the Wood River Valley in the northern part of the county. Because the entire population of the valley depends on groundwater for domestic supply, from either domestic or municipal-supply wells, this growth has caused concern about the long-term sustainability of the groundwater resource (Bartolino and Adkins, 2012).

The upper Wood River Valley is more developed than the lower valley and contains the incorporated communities of Sun Valley, Ketchum, Hailey, and Bellevue (fig. 1). The lower Wood River Valley is dominated by farms and ranches (irrigated by groundwater and diverted surface water), and contains the small communities of Gannett and Picabo. A number of tributary canyons to the main valley have been developed over the last 50 years (Bartolino and Adkins, 2012).

The Aquifer System

The Wood River Valley aquifer system is composed primarily of Quaternary-age sediment and basalt. This material constitutes the three components of the aquifer system: a single unconfined aquifer underlying the entire valley, a deeper confined aquifer present to the south of Baseline Road (fig. 1), and a confining layer separating the two aquifers. The confining layer thickens toward the south and generally, as land-surface altitude decreases in the same direction, the water-level surface rises above land surface so that wells flow under artesian pressure. South and east of Gannett the confining unit thins and disappears over the basalt.

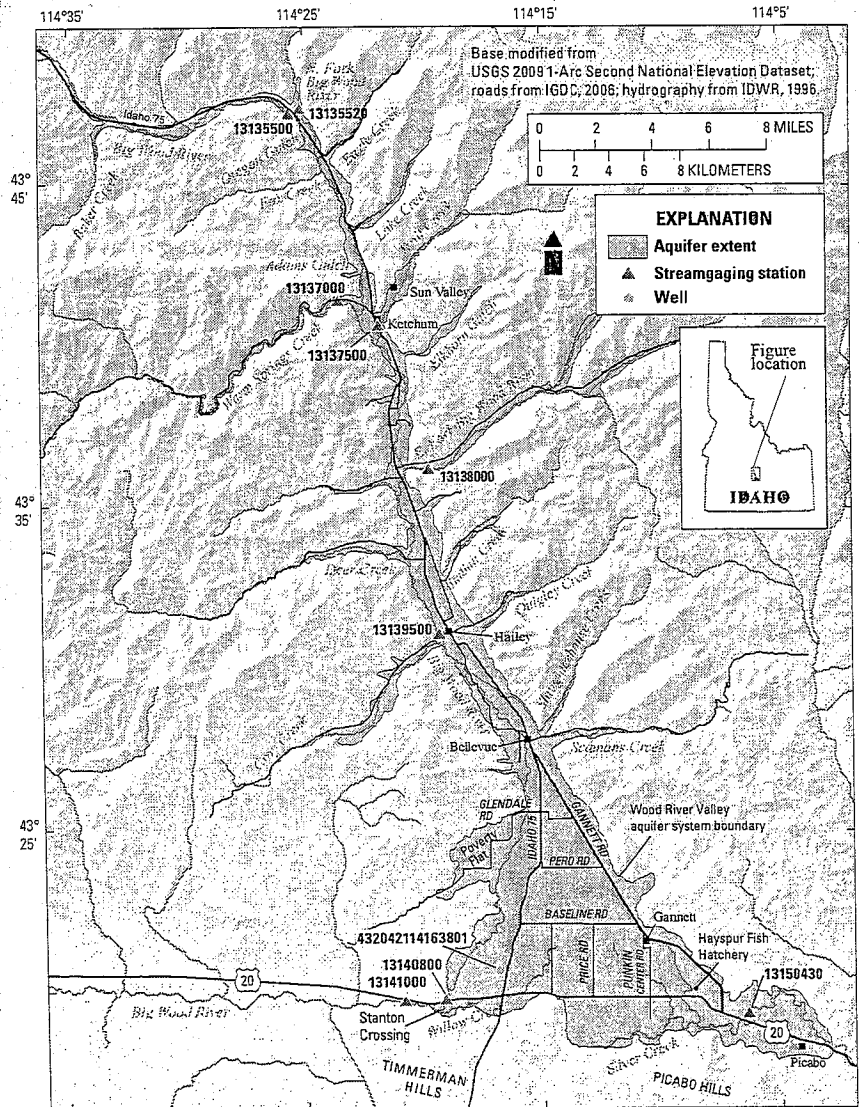


Figure 1. Locations of communities, selected U.S. Geological Survey streamgaging stations, and other features, Wood River Valley, south-central Idaho (modified from Bartolino and Adkins, 2012).

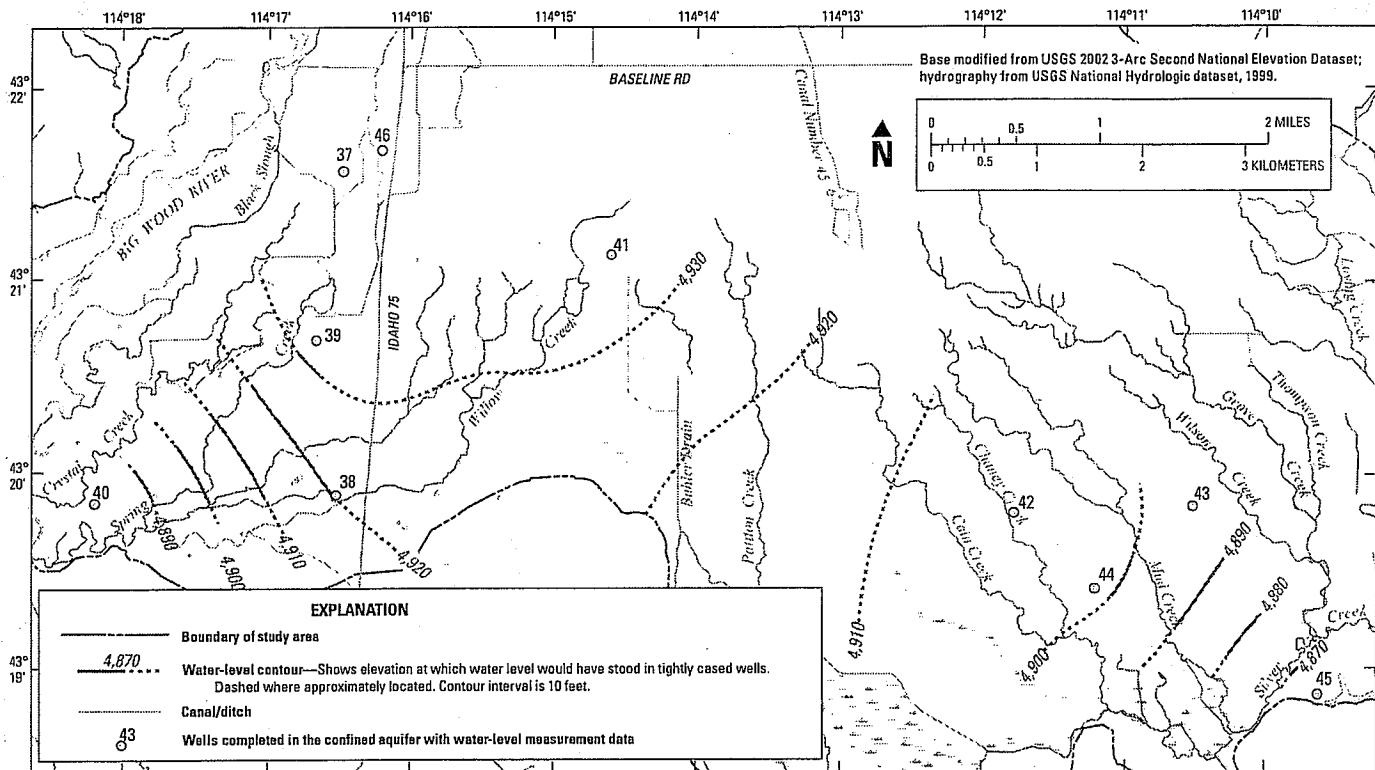


Figure 2. Groundwater levels in the confined aquifer, Wood River Valley aquifer system in October 2006 (modified from Skinner and others, 2007).

The sediment and basalt can be divided into three hydrogeologic units: a coarse-grained sand and gravel unit, a fine-grained silt and clay unit, and a basalt unit. Although the three units exist throughout the aquifer system, the two aquifers are primarily composed of coarse-grained sediment and basalt and the confining unit is mostly composed of the fine-grained sediment. The sediments are largely derived from two episodes of glaciation in the surrounding mountains and upper reaches of tributary canyons. The basalt unit contains two flows of different ages, and is limited to the southeastern part of the Wood River Valley.

In some areas, the underlying bedrock may be hydraulically connected to the sediment and basalt units; however, the bedrock likely contains a small percentage of available water in the aquifer system. These bedrock aquifers probably are separate from the Wood River Valley aquifer system.

Generally, groundwater movement through the Wood River Valley aquifer system is relatively straightforward. Groundwater under unconfined conditions moves down-valley to the south, where it either enters the deeper confined aquifer or remains in the shallow unconfined

aquifer; the two aquifers appear to hydraulically reconnect in the area south of Gannett. A groundwater budget by Bartolino (2009) indicates that recharge primarily is from precipitation or seepage from streams, and discharge primarily is through springs and seeps to streams, pumpage, or subsurface outflow from the aquifer system. The rerouting of surface water into a network of irrigation canals in the late 19th century, construction of groundwater wells, and increased demand have affected groundwater flow, but the overall direction of groundwater movement remains down the topographic gradient and toward the eastern outlet of the valley at Picabo and western outlet near Stanton Crossing (figs. 1 and 2).

Depth to groundwater in the upper valley commonly is less than 10 ft, and increases southward to approximately 90 ft; water levels in wells completed in the unconfined aquifer in the lower valley range from less than 10 ft to approximately 150 ft below land surface. Wells completed in the confined aquifer are under artesian pressure and flow where the water-level surface is above land surface (Skinner and others, 2007).

Hydrologic Trends

A USGS report by Skinner and others (2007) verified statistically significant declining trends in mean annual water levels in three wells that seem representative of general conditions in the aquifer system. Two of these wells are completed in the unconfined aquifer and one well is in the confined aquifer (fig. 3): all three have more than 50 years of measurement data.

Skinner and others (2007) also analyzed streamflow trends for three streamgaging stations in the Wood River Valley (fig. 1). The findings included:

- The Big Wood River at Hailey streamgaging station (13139500) showed an increase in mean monthly base flow for March over the 90-year period of record, possibly because of earlier snowpack runoff.
- Low-flow analyses for the Big Wood River near Bellevue streamgaging station (13141000) showed a mean decrease of about 15 cubic feet per second since the 1940s, whereas the mean monthly discharge showed decreasing trends for the winter months.

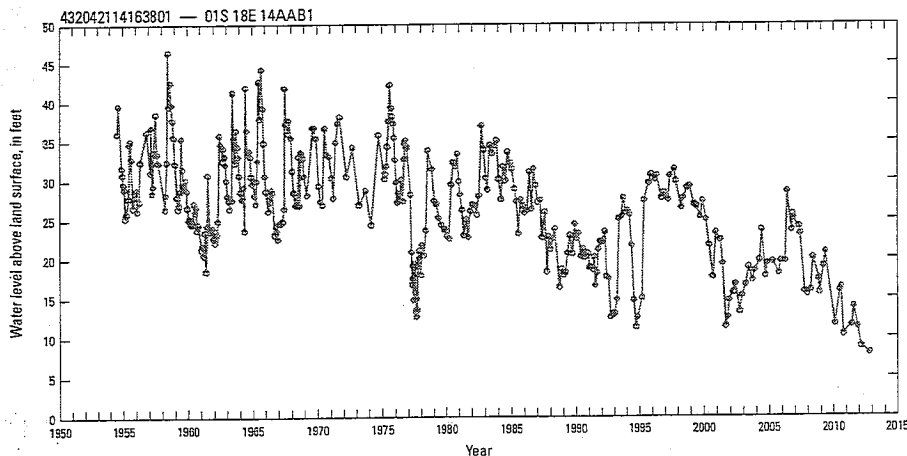


Figure 3. Depth to water for well 432042114163801 completed in the confined aquifer of the Wood River Valley aquifer system, July 1954–February 2012. A water level above land surface indicates a flowing well.

- The Silver Creek at Sportsman Access near Picabo streamgaging station (13150430) showed decreases in annual discharge, as well as mean monthly discharge for July through February and April, during the 1975–2005 period of record. Because Silver Creek and its tributaries are fed primarily by groundwater through seeps and springs, seasonal fluctuations in groundwater levels affect streamflow.

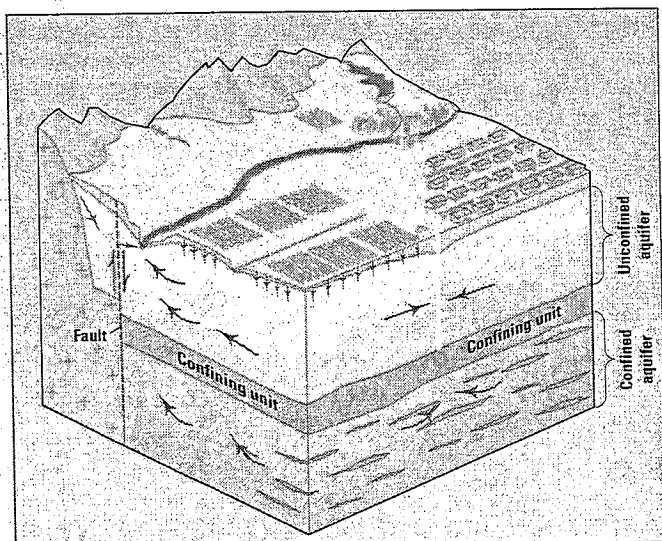
Groundwater Modeling: A Tool for Understanding and Managing the Resource

In the most general terms, a model is a simplified representation of the appearance or operation of a real object or system. Groundwater-flow models attempt to reproduce, or simulate, the processes of a real aquifer system by solving

a series of mathematical equations. Groundwater-flow models are usually constructed by representing the geology of the groundwater system as a series of rectangular three-dimensional blocks or model cells surrounded by a boundary (figs. 4 and 5).

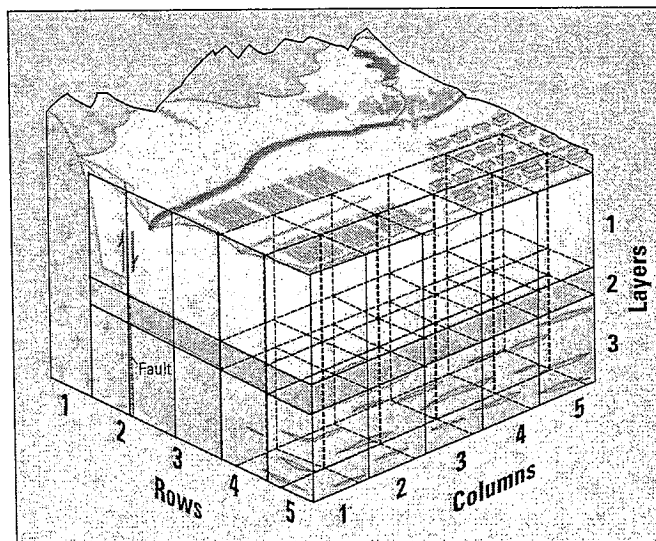
A numerical computer model, in this case MODFLOW, is a program containing a number of equations that represent groundwater flow between the model cells. As the equations are solved, the program accounts for the flow of water through the model domain and for each cell; a model calculates the volume of water flowing horizontally and vertically between the cells and any changes in the volume of water stored in each cell.

By applying the basic laws of physics and reasonably representing the actual groundwater system in the model cells and boundaries, a groundwater-flow model can provide an accurate, quantitative depiction of the relations between groundwater flow-system stresses (such as pumpage) and responses (such as water-level declines). This understanding enables forecasts of future hydrologic conditions in response to changes in recharge, discharge, or varying management scenarios. Such forecasts inherently contain some uncertainty because of sparse or inaccurate data, errors in scientists' understanding of the system, and poor estimates of future conditions. Despite such uncertainties, groundwater-flow models often represent the best available tool for management decisions (Alley and others, 1999).



Modified from Leake (1997) and Reilly and McAda (2002)

Figure 4. Block diagram of part of a hypothetical basin-fill groundwater system. The blue arrows show the direction of groundwater flow. Among the features shown are an unconfined aquifer overlying a confining unit and confined aquifer, a gaining stream, infiltration from irrigated agriculture, and mountain-front recharge.



Modified from Leake (1997) and Reilly and McAda (2002)

Figure 5. Block diagram of part of a hypothetical basin-fill groundwater system with some model cells shown superimposed. The model cells cover the entire simulated groundwater system.

One of the keys to a successful groundwater-flow model that produces accurate forecasts is the appropriate representation of important aspects of the physical system. The selection of these aspects depends, in part, on the objectives of the modeling project. These modeling objectives also influence the extent and depth of the modeled area, the size and shape of the model cells and layers, the methods used to represent the boundary conditions of the system, and the use of any specialized techniques or equations to address specific flow conditions or processes.

The Wood River Valley groundwater-flow model will be designed to further the basic understanding of the aquifer system, and ultimately to examine effects on the groundwater system and its interaction with the Big Wood River due to changes in water use, recharge, or discharge. Additionally, by virtue of the attempt to mathematically represent the groundwater-flow system, the model can be used to evaluate how well components of the system are understood and which components have the most effect on calculations. This analysis then can be used to guide the collection of additional data that will most improve the understanding of the Wood River Valley aquifer system.

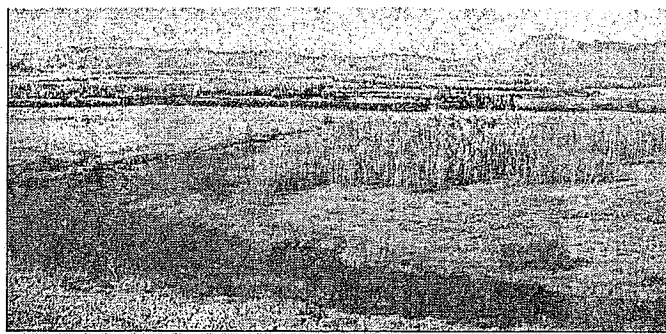
The Collaborative USGS-IDWR Groundwater-Flow Model Project

The USGS began cooperative groundwater studies in the Wood River Valley in 1928 with one of the precursor agencies to the IDWR (Stearns and others, 1936). Since then, the USGS and IDWR have cooperated with each other, numerous local governments, and other entities to understand the water resources of the valley. The latest effort began in 2004 when the USGS, in cooperation with Blaine County, City of Hailey, City of Ketchum, The Nature Conservancy, City of Sun Valley, Sun Valley Water and Sewer District, Blaine Soil Conservation District, City of Bellevue, and Citizens for Smart Growth undertook a four-phase, multiyear effort to better understand the groundwater system and provide information for scientifically-informed decisions.

The USGS, in collaboration with the IDWR, will incorporate this improved understanding of the Wood River Valley aquifer system into a groundwater-flow model that will serve as a tool for water-rights administration and water-resource management and planning. The 3-year study will be from late 2012 through 2015. Additional data collection, including water-level monitoring and streamflow measurements, will be done in 2013.

The numerical groundwater-flow model will be constructed using MODFLOW to simulate potential anthropogenic and climatic effects on groundwater and surface-water resources. A USGS report will be published to describe numerical model construction and limitations, as well as results from several simulations that represent a range of potential anthropogenic activities (formulated in consultation with stakeholders) and hydrologic conditions. The documented model will be published by the USGS and made publically available through a USGS website.

A Technical Advisory Committee is planned to provide for transparency in model development and to serve as a vehicle for stakeholder input. Technical representation will include interested parties such as water-user groups and current USGS cooperating organizations in the Wood River Valley.



Silver Creek on the Nature Conservancy Silver Creek Preserve, Idaho. View is from the Picabo Hills looking north up the Wood River Valley. The low hills to the right (east) are the southeastern edge of the Pioneer Mountains, the snow covered peaks in the background are in the Smokey Mountains. The valley bottom visible in the medium to far is the Bellevue Fan. Photograph taken November 19, 2004.

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