

# COUNCIL DECISION REQUEST

SUBJECT: **Cragin Pipeline Project – Aquifer Storage and Recovery Project Phase I**

MEETING DATE:

PAYSON GOAL: NEW:            EXISTING: X

ITEM NO.:

TENTATIVE SCHEDULE: Completion prior to Spring 2012

SUBMITTED BY: Michael Ploughe   
Water Resources Manager - Hydrogeologist

AMOUNT BUDGETED: \$1.5M (Phases I and II, ARRA)

SUBMITTAL TO AGENDA  
APPROVED BY TOWN MANAGER

EXPENDITURE REQUIRED: \$259,500 (ARRA funded)

CONT. FUNDING REQUIRED:

  
\_\_\_\_\_

EXHIBITS (If Applicable, To Be Attached): Please find scope of work and services contract agreement attached as “Exhibit A”

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## POSSIBLE MOTION

**I move to approve the contract with HydroSystems Inc. and authorize the Mayor to sign all necessary contract documents.**

**SUMMARY OF THE BASIS FOR POSSIBLE MOTION:** Aquifer Storage and Recovery “ASR” is a key element in planning for long-term water resources sustainability as well as for maximizing the beneficial use and perfection of the Town’s 3,000 acre/ft/yr surface water right from Cragin Reservoir. This project, Phase I, will refine the results of a 2007 ASR study, investigate the potential for unintended impacts, and further identify additional optimum sites for Aquifer Storage and Recovery as needed. It is recommended that at least 1,500gpm of ASR capacity be identified. At this time about half of this targeted flow rate has been identified. The proposed Phase I work will identify the sites where additional capacity may be gained and will also lead to the formulation of design and engineering specifications required for Phase II (construction) of the ASR project (future modification and/or drilling of new wells for ASR purposes under ARRA funding).

**PROS:** Implementation of the Cragin Aquifer Storage and Recovery Project is vitally important to the long-term sustainability of water resources and will provide a means to maximize future operational flexibility concerning the storage and seasonal delivery of Cragin water during the winter months.

**CONS:** None

**PUBLIC INPUT (if any):**

**BOARD/COMMITTEE/COMMISSION ACTIONS/RECOMMENDATIONS (if any) (give dates and attach minutes):**

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**FUNDING:**

662-5-5451-00-8600 C-12

AUG 05 2010 I. 2

# COUNCIL DECISION REQUEST

Acct:	Budget: 9,835,000	Available: 9,835,000	Expense: 259,500	Remaining: 9,575,500
Acct:	Budget:	Available:	Expense:	Remaining:
Acct:	Budget:	Available:	Expense:	Remaining:

BA: H. A. Cribb Date: 7/21/10

**AGREEMENT  
BETWEEN "HydroSystems Inc. "  
AND THE TOWN OF PAYSON  
FOR PROFESSIONAL SERVICES IN CONNECTION WITH  
Payson Aquifer Storage and Recovery Project – Phase I  
[\*\*Cragin Water Project - ARRA Element\*\*]**

**THIS AGREEMENT** entered into this \_\_\_ day of \_\_\_\_\_, 2010 by and between HydroSystems Inc., 9831 South 51<sup>st</sup> Street, Phoenix, AZ 85044, (hereinafter referred to as the "CONSULTANT") and the Town of Payson, a municipal corporation, located at 303 North Beeline Highway, Payson, Arizona 85541 (hereinafter referred to as "Client").

**RECITALS**

- A. Client desires to engage CONSULTANT to provide professional services; and
- B. Client finds that the proposed Scope of Services and terms of this Agreement are acceptable; and
- C. CONSULTANT desires to provide said services and agrees to do so for the compensation and upon the terms and conditions as hereinafter set forth.

**NOW, THEREFORE**, based upon the mutual promises, covenants and conditions herein contained, the Parties do hereby agree as follows:

Section 1. Terms and Conditions

- A. Employment of the CONSULTANT. Client hereby engages CONSULTANT and CONSULTANT hereby agrees to perform the professional services as set forth herein.
- B. Scope of Services. CONSULTANT shall perform, in a proper and professional manner, the services set forth in the Scope of Services, marked Attachment "A", attached hereto, and by this reference incorporated herein as though set forth in full at this point. The work is generally described as:

Professional hydrological and geotechnical services are to be performed for the the identification, testing, and investigation of wells and locations suitable for the safe application of aquifer storage and recovery or "ASR" technology. This work will identify suitable wells and/or sites to be used as an integral part of the Town's future Cragin water supply infrastructure.
- C. Time for Completion. The professional engineering report for **Payson Aquifer Storage and Recovery ("ASR") Project – Phase I** as defined in Attachment "A", Scope of Services, shall be completed within two years or 730 calendar days from date of execution of this contract.
- D. Extra Services. CONSULTANT shall provide extra services, not specifically called for in Attachment "A", Scope of Services, upon request or authorization of the Client at a fee to be determined at the time of the request. However, it is the intent that the Scope of Services, with modifications by the CONSULTANT in the Special Provisions, if any, is complete and sufficient to accomplish the purposes of this Agreement.

E. Changes. If Client has requested modifications or changes in the extent of the Project, the time of performance of the services of CONSULTANT and the compensation therefore shall be adjusted appropriately and shall be incorporated in written amendments to this Agreement. Notwithstanding the foregoing, CONSULTANT shall perform no modification, changes or additional work, except as and until authorized in writing by Client to do so.

F. Fees. Client shall pay CONSULTANT, for the services set forth in Attachment "A", Scope of Services, a time and material not to exceed fee of Two Hundred Fifty Nine Thousand and Five Hundred dollars and 00/100, (\$259,500.00).

G. Payment. CONSULTANT will submit to Client monthly invoices based on a percentage of work completed along with all reimbursable expenses incurred. Client will be responsible for paying the invoice in full within thirty (30) days of receipt. If Client fails to make any payment due CONSULTANT for services performed as set forth in Attachment "A", Scope of Services, within thirty (30) days after receipt of CONSULTANT's bill therefore the amounts due CONSULTANT shall include a charge at the rate of 1.50% per month from said day; and in addition CONSULTANT may suspend services under this Agreement until it has been paid in full all amounts due it for services and expenses. CONSULTANT shall be entitled to actual costs for remobilizing on any work suspended for thirty (30) days or more on account of non-payment or a substantial portion of the fee within the time prescribed in this Agreement.

H. Reimbursables. Unless otherwise stated in Attachment "A", Scope of Services, charges for out-of-pocket expenses not directly furnished by CONSULTANT will be paid by Client at a rate of 1.10 times the cost of such expense, up to a maximum of Five Hundred Dollars, excluding subconsultants, in addition to the amount set forth in paragraph 2 (F) herein above. CONSULTANT shall not be entitled for payment for printing or copying that occurs during the normal course of work required to accomplish the Scope of Services, except as authorized by the Client. Printing, binding, copying and deliveries of inspection reports, field notes and record drawings for the Client shall not be considered reimbursable.

I. Ownership and Re-Use of Documents. All documents, including original drawings, estimates, specifications, field notes, inspection reports, testing results, record drawings and data are and shall be the property of the Client, and shall be provided to the Client upon request during the term of this Agreement, and without demand at the conclusion of this Agreement. Client will not reuse the documents for any other project unless CONSULTANT has given written authorization to do so.

J. Delays Beyond the Control of the CONSULTANT. It is agreed that events which are beyond the control of the CONSULTANT may occur which may delay the performance of the Scope of Services of this Agreement. In the event that the performance of the Scope of Services by the CONSULTANT is delayed beyond its control, the CONSULTANT shall notify, in writing, the Client of such delay and the reason therefore, and Client shall extend the time of performance appropriately.

K. Liability of CONSULTANT. CONSULTANT shall be liable only for damage caused by negligence of it, its employees, sub-consultants or subcontractors. CONSULTANT shall notify Client of the engagement of any and all subcontractors or consultants, and client shall have sufficient and adequate opportunity to review the

qualifications of such subcontractors or consultants, and shall have the right to approve or disapprove their engagement. Client requires subcontractors or consultants of the CONSULTANT shall provide appropriate certificates of insurance to the client prior to their performing of any work relating to this Agreement.

L. Problems. Any problems relating to the services provided herein are to be brought to the attention of CONSULTANT as soon as encountered and, if possible, before CONSULTANT incurs any obligations. CONSULTANT reserves the sole right to correct any errors it is responsible for, including, but not limited to, the selection of a subcontractor or sub-consultant and the negotiation of fees.

M. Indemnification. To the fullest extent permitted by law, the CONSULTANT shall indemnify and hold harmless the Town of Payson, its agents, officers, officials and employees from and against all tortuous claims, damages, losses and expenses (including but not limited to attorney fees, court costs, and the cost of appellate proceedings), relating to, arising out of, or alleged to have resulted from the negligent acts, errors, mistakes or omissions of the CONSULTANT, its agents, employees, or any tier of CONSULTANT's sub-consultants in the performance of this Contract. CONSULTANT's duty to defend, hold harmless and indemnify the Town of Payson, its agents, officers, officials and employees shall arise in connection with any tortuous claim, damage, loss or expense that is attributable to bodily injury, sickness, disease, death or injury to, impairment, or destruction of property including loss of use resulting therefrom, caused by any CONSULTANT's negligent acts errors, mistakes, omissions, work or services in the performance of this Contract including any employee of the CONSULTANT, any tier of CONSULTANT's subcontractor or any other person for whose acts, errors, mistakes, omissions, work or services the CONSULTANT may be legally liable.

The amount and type of insurance coverage requirements set forth in Paragraph N herein will in no way be construed as limiting the scope of the indemnity in this paragraph.

N. Insurance. All insurance required herein shall be maintained in full force and effect until all work or service required to be performed under the terms of the Contract is satisfactorily completed and formally accepted; failure to do so may, at the sole discretion of the Town of Payson, constitute a material breach of this Contract.

The CONSULTANT's insurance shall be primary insurance as respects to the Town of Payson, and any insurance or self-insurance maintained by the Town of Payson shall not contribute to it.

Consultant shall comply with the claim reporting provisions of the insurance policies and shall not cause any breach of an insurance policy warranty that would affect coverage afforded under the insurance policies to protect the Town of Payson

The insurance policies, except Workers' Compensation, shall contain a waiver of transfer rights of recovery (subrogation) against the Town of Payson, its agents, officers, officials and employees for any claims arising out of the CONSULTANT's negligent acts, errors, mistakes, omissions, work or service.

The insurance policies may provide coverage which contain deductibles or self-insured retentions. Such deductible and/or self-insured retentions shall not be applicable with respect to the coverage provided to the Town of Payson under such policies. The

CONSULTANT shall be solely responsible for the deductible and/or self insured retention and the Town of Payson, at its option, may require the CONSULTANT to secure payment of such deductibles or self-insured retentions by a Surety Bond or an irrevocable and unconditional letter of credit.

The insurance policies, except Workers' Compensation and Professional Liability, required by this Contract, shall name the Town of Payson, its agents, officers, officials and employees as Additional Insureds.

Required Coverage

General Liability.	\$1,000,000 / occurrence;	\$2,000,000 aggregate.
Workers' Compensation.	\$100,000 / accident;	\$100,000 disease; \$500,000 disease limit
Professional Liability	\$1,000,000 per claim.	

Prior to commencing work or services under this Contract, CONSULTANT shall furnish the Town of Payson with Certificates of Insurance, or formal endorsements as required by the Contract, issued by CONSULTANT's insurer(s), as evidence that policies providing the required coverage's, conditions and limits required by this Contract are in full force and effect.

In the event any insurance policy(ies) required by this Contract is(are) written on a "claims made" basis, coverage shall extend for two years past completion and acceptance of the Contractor's work or services as evidenced by annual Certificates of Insurance.

If a policy does expire during the life of the Contract, a renewal certificate must be sent to the Town of Payson fifteen (15) days prior to the expiration date.

O. Termination of Contract. This Agreement may be terminated by either Party at any time upon thirty (30) days prior written notice to the other Party. Upon such termination, Client shall pay CONSULTANT all monies owed under this Agreement for all work performed up to the effective date of termination. Unless sooner terminated, this Agreement shall terminate fourteen (14) calendar days after completion of construction. In the event of such cancellation, all work performed by CONSULTANT up to that time, including but not limited to field information, studies and rough or final drafts of working papers, shall be delivered to the Client by CONSULTANT.

P. Publicity. No information relative to the Project shall be released by CONSULTANT for publication, advertising, or for any other purpose without the prior written approval of the Client.

Q. Supplementary Conditions. Supplementary Conditions, if any, shall apply to this Agreement, as set forth in Attachment "B" - Supplementary Conditions, which is attached hereto and incorporated herein by this reference as though set forth in full at this point.

R. Entire Agreement. This Agreement, with attachments, represents the entire understanding between Client and CONSULTANT in respect to the Project, all prior understanding and agreements are merged herein and this Agreement may only be modified by an instrument in writing executed with the same formalities as this instrument.

S. Successors and Assigns. Client and CONSULTANT each binds himself and his partners, successors, executors, administrators and assigns to the other party to this Agreement and to the partners, successors, executors, administrators and assigns of such other party, in respect to all covenants of this Agreement. Except as above, neither Client nor CONSULTANT shall assign, sublet or transfer its interest in this Agreement without the written consent of the other; however, CONSULTANT may employ others to assist him in carrying out its duties under this Agreement. Nothing herein shall be construed as giving any rights or benefits hereunder to anyone other than Client and CONSULTANT.

T. Non-Appropriation/Non-Receipt. Nothing herein shall be construed as obligating the Town to expend, or as involving the Town in any contract or other obligation for the future payment of money in excess of appropriations authorized by law and administratively allocated for this work. Nor shall anything herein be construed as obligating the Town to expend, or as involving the Town in any contract or other obligation for the future payment of money if the Town does not have sufficient revenues for this expenditure.

U. Business License. The CONSULTANT shall provide the Town with a copy of its Town of Payson business license. If the CONSULTANT is exempt from the Town's business licensing requirements, it shall still provide the Town with the items required under Section 110.03(C)-(D) of the Town Code.

V. Scrutinized Business Operations. Pursuant to A.R.S. §35-391.06, the Parties hereby warrant and represent that they do not have, nor any of their subcontractors have, and during the term of the Contract will not have a scrutinized business operation in either Sudan or Iran.

W. Authorized Presence Requirements/Government Procurement (A.R.S. §41-4401).

W.1 Consultant and any Sub-consultant employed by Consultant warrants their compliance with all Federal immigration laws and regulations that relate to their employees and Arizona Revised Statutes Section 23-214(A).

W.2 A breach of the warranty under Section W.1 above shall be deemed a material breach of this Contract and shall be subject to penalties up to and including termination of the Contract.

W.3 The Town retains the legal right to inspect the papers of the Consultant or Sub-consultant who works on this Contract to ensure that the Consultant or Sub-consultant is complying with Section W.1.

X. Dispute Resolution. This Agreement shall be governed and construed in accordance with the internal laws of the State of Arizona. In particular, this Agreement is subject to the provisions of A.R.S. § 38-511, the terms of which are incorporated herein, and which provides for cancellation of contracts by the municipality for certain conflicts of interest. With the written consent of both Parties, any dispute, controversy, claim, or cause of action arising out of or related to this Agreement may, but in no event need, be settled by submission to binding arbitration in accordance with the rules of the American Arbitration Association and the Arizona Uniform Arbitration Act, A.R.S. § 12-1501, et seq. Judgment upon any award rendered by the arbitrator(s), if filed in Arizona Superior Court, shall be filed in the Superior Court of Gila County, Arizona; or any such dispute,

controversy, claim, or cause of action may be litigated in the Superior Court of Gila County, Arizona. The venue for any such dispute shall be Gila County, Arizona, and both Parties consent in advance to such venue and jurisdiction and waive any right to object that Gila County is an inconvenient or improper forum based upon lack of venue. Neither Party shall be entitled to recover from the other party any of its attorneys' fees, costs, or expert witness fees incurred in any such dispute, controversy, claim, or cause of action, but each party shall bear its own attorneys' fees without contribution from the other party, whether the same is resolved through arbitration, litigation in a court, or otherwise.

**WITNESS WHEREOF**, CONSULTANT and Client have executed this Agreement on the day and year first above written.

Town of Payson  
303 N. Beeline Highway  
Payson, AZ 85541  
Telephone: (928) 474-5242  
FAX: (928) 474-7052

By: \_\_\_\_\_  
Mayor

Attest: \_\_\_\_\_  
Town Clerk

HydroSystems Inc.  
9831 South 51<sup>st</sup> Street  
Phoenix, AZ 85044  
Telephone: 480-517-9050  
FAX: 480-517-9049

By: 

Title: President

GARY G. SMALL

## APPROVAL AS TO FORM

The Town of Payson Legal Department has reviewed this contract and approved it as to form. When reviewing this contract for form, the Legal Department considers whether the following situations have been addressed:

- I. Identification of parties;
- II. Offer and acceptance;
- III. Existence of contract consideration (we do not review to determine if consideration is adequate);
- IV. That certain provisions specifically required by statute are included (i.e., provisions concerning non-availability of funds and conflict of interest, A.R.S. § 38-511).

We have not reviewed the contract for other issues. Therefore, approval as to form should not be considered as approval of the appropriateness of the terms or conditions of the contract or the underlying transaction. In addition, approval as to the form should not be considered approval of the underlying policy considerations addressed by the contract.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2010.

By \_\_\_\_\_  
Timothy Wright, Town of Payson Attorney

# Attachment "A"

June 24, 2010

## TOWN OF PAYSON

### ASR Project

#### Phase 1

#### Scope of Work

The Town of Payson (Town) will receive 3,000 acre-feet per year of Cragin Reservoir water from the Salt River Project for use in their potable water system. This water will be pumped from the reservoir and delivered to the Town through a new 18-inch diameter pipeline. The water will first be filtered and chlorinated prior to delivery to the existing municipal infrastructure. The challenge is in the rate at which the water is going to be delivered. This rate is greater than the Town's water demand so some sort of storage will be required. This project will further investigate the possibility of underground aquifer storage and recovery (ASR). Certain existing water production wells will be evaluated as possible candidates for modification to ASR wells. This project is perceived to have several phases.

The anticipated tasks for Phase 1 are summarized below. The costs prepared represent an estimate of the costs experienced for similar type projects. The hours actually worked in the completion of this Scope of Work (SOW) will be billed on a time and materials basis for an amount not to exceed the fees proposed on the attached Man Hour and Cost Estimate. Any additional services that are not part of this SOW will require authorization by the Town and will be billed on a time and materials basis.

#### **Task 50      Background Data Collection and Review**

Existing data from the Town in addition to public and private sources will be collected, assembled and reviewed as the first step to become current on the project. Most of the raw data will be provided by the Town along with the results of some specific research and data acquisition.

#### **Task 100     Arsenic Investigation**

The Town had experienced some (likely temporary) increases in arsenic concentrations in some of their wells in the southern end of Town near an existing passive recharge project. This task is to research possible causes by examining the existing water quality data as well as mineral composition of the surrounding rocks and develop a theory as to the cause of the increase in arsenic. This may also require some technical research and possibly some sample gathering and analysis. The goal is offered as a measure to the possibility that the proposed ASR program could potentially mobilize arsenic from the aquifer host rock. Therefore, this work is proposed as an essential element in evaluating the risks, if any, presented which ASR application may have relative to the potential for mobilizing arsenic.

#### **Task 150     Injection Testing**

In 2006-2007 six (6) water production wells were tested using potable water to determine the injection rates that could be sustained at each well site. This task is a continuation of the previous testing. It is estimated that up to six (6) additional wells will be tested during low water demand times for the purpose of evaluating possible wells that could be converted to ASR wells.

It is estimated that testing will take three (3) days to conduct at each well site. Some of the tests may be performed simultaneously. A total of fifteen (15) field days are estimated for this task.

**Task 200 General Contractor and Technical Specifications**

A set of General Contractor Specifications will be developed based on the type of equipment and manpower needed to complete various well modification, aquifer testing, video logging and geophysical logging requirements. These contractors will be placed in a resource pool whereby a contractor can be selected to perform specific tasks based on experience and the type of equipment available. The Town will contract directly with the contractor(s).

A brief set of Technical Specifications will be developed for any modification, deepening, re-drilling or constructing of any specific well. These specifications will include the conceptual well design with a written description of materials and equipment to perform these services on the well including a bid cost schedule. The technical specifications will be developed in a manner that will meet or exceed ADWR's Minimum Well Construction Standards.

**Task 250 Conceptual Design Report**

A conceptual design report will be developed to include the expected modifications of the selected wells to be modified for ASR. This report will include well design drawings of the existing well and the proposed modifications. This document will be the basis for obtaining contractor pricing on each well.

**Task 300 Permitting**

A well modification permit will be developed and filed with ADWR for up to four (4) of the Town's water production wells proposed for conversion to ASR wells. This task includes the completion of the necessary applications along with the existing well designs and the proposed modifications. ADWR permit fees for the well modifications will be the responsibility of the Town.

The Environmental Protection Agency (EPA) is the controlling Agency for the injection of surface water into a drinking water aquifer. This permitting falls under the Class V injection wells. This task includes the completion of the necessary applications along with the "As-built" well designs and the proposed system operations strategy. Fees for the Underground Injection Control (UIC) permits will be the responsibility of the Town.

One (1) Notice of Intent (NOI) to Drill application will be developed and filed with the ADWR for one new well. This application will incorporate the well design, site location, and specific information about the well drilling contractor. Progress of the NOI will be periodically checked until the drill card has been issued. ADWR permit fees for the NOI permits will be the responsibility of the Town.

**Task 350 Well Modification Oversight**

Part-time oversight will be provided during the modification of up to four (4) water production wells as described in the technical specifications. Field staff will maintain daily communications with the well drilling contractor(s). A field log will be developed to document the activities that occur on site during the well modification plus an "As-built" well design will be developed. Field staff will also coordinate and oversee borehole geophysical and video logging as applicable. This task includes coordination with the Contractor(s) and Town. The

Town will contract directly with the well drilling contractor(s). It is estimated that well modification will require a total of fifteen (15) field days for this task.

**Task 400 Well Drilling Oversight**

Part-time oversight will be provided during the drilling of one new (1) ASR well as described in the technical specifications. Field staff will maintain daily communications with the well drilling contractor(s). A field log will be developed to document the activities that occur on site during the drilling of the well plus an “As-built” well design will be developed. Field staff will also coordinate and oversee borehole geophysical and video logging as applicable. This task includes coordination with the Contractor(s) and Town. The Town will contract directly with the well drilling contractor(s). It is estimated that well drilling will require a total of five (5) field days for this task.

**Task 450 Summary Reporting**

The construction, modification and testing of the various wells will be documented in a Summary Report. The Summary Report will include all the data developed during this phase of the project as well as recommendations for the following phases of work. Two (2) draft copies of the report will be provided for review and eight (8) final copies and one (1) electronic copy to the Town.

**Task 500 Project Administration, and Meetings**

Project administration, coordination, scheduling and management activities including monthly billing will be performed. This task will also include communication with Tetra-Tech and the Town as well as the coordination of various aspects with the selected contractors. Up to six (6) meetings will be held in Payson to discuss various aspects of the project. This task will also include the routine communications regarding the project such as e-mails and telephone calls.

**Task 550 Out of Scope Services**

This would include any tasks associated with this phase of the project that was not considered at the time this scope was developed. Prior to any new tasks being added, approval from the Town would be required.

