



Board of Supervisors Memorandum

February 18, 2014

Agenda Item 14 – Proposed Redington Water Conservation District

Background

In early January 2014, attorneys for the Bayless & Berkalew Company, which is owned by the Smallhouse family, sent a memorandum to the Pima County Board of Supervisors and County Attorney regarding the submission of a petition to form the Redington Irrigation and Water Conservation District in the San Pedro River Valley in Pima County. The proposed irrigation would encompass some 3,750 acres on the entire length of the San Pedro River in Pima County, of which about 800 acres are currently irrigated for pasture. A petition was formally submitted on January 27, 2014 by Mr. Andrew Smallhouse, and only lands owned by the Bayless & Berkalew Company are proposed for inclusion in the irrigation district. His stated purpose in forming the district is to become eligible for future wholesale power and to transition to solar power.

Initial Staff Review of Proposal

To provide sufficient information for the Board to evaluate this petition, I asked staff to provide a report that reviews the issues associated with creating an irrigation district and whether this would be in the County's interest. The attached January 30, 2014 staff report provides background information, procedural steps, and a summary of issues and questions raised by staff and the Regional Flood Control District (RFCD).

Because additional water pumping could impact Pima County conservation lands, the RFCD memorandum concludes that *"the formation of the Redington Irrigation Water and Conservation District is not in Pima County's interest. The approval of the proposed Redington Irrigation and Water Conservation District, without condition, may adversely impact the shallow ground water area along the San Pedro, including impacts to riparian habitat on Pima County land, and the water resources below that land."*

The RFCD memorandum goes on to recommend that *"Should the irrigation district be approved [by the Board of Supervisors], the district should be required to develop a water conservation plan to demonstrate how it will minimize pumping and improve irrigation efficiency."* This report was provided to Mr. Smallhouse on February 10, 2014. He responded that the number of acres they can irrigate is limited by the 2005 Gila River Indian Water Rights Settlement.

In addition to the questions about impacts to shallow groundwater from increased pumping and potential negative environmental impacts, broad powers are conveyed to irrigation districts as municipal corporations; and a number of other questions with potentially large implications for Pima County and others have been raised, such as the rights of irrigation

districts to condemn land and water rights of others and the rights of irrigation districts to approve or deny sever and transfer of surface water rights owned by others upstream along the San Pedro River to the border with Mexico.

Legal Concerns Over Transfer of Other Water Rights in the San Pedro Watershed

Please see the attached two Confidential Attorney/Client Memoranda:

1. January 24, 2014 Memorandum from Deputy County Attorneys Marc Natelsky and Michael McNulty to Sustainability and Conservation Director Linda Mayro.
2. February 14, 2014 Memorandum from Deputy County Attorney Michael McNulty to County Administrator Chuck Huckelberry.

Others Have Raised Concerns

The Tucson Audubon Society, Nature Conservancy and other national and local conservation organizations recognize the San Pedro River as perhaps the most biologically important river in the entire Southwest, serving as critical habitat for numerous bird species and other wildlife. The Audubon Society, Coalition for Sonoran Desert Protection and Cascabel Conservation Association have expressed concern about how to ensure there will be no negative environmental impacts to the San Pedro River system from establishing the Redington Irrigation and Water Conservation District. Some suggestions might include limiting the acreage under cultivation to the current 800 acres, limiting groundwater pumping and reducing the size of the proposed irrigation district to only those areas currently under cultivation and the locations of wells and other areas where electricity is needed.

Recommendation

Due to the short timeframe allowed staff to identify and evaluate these important issues and because the Board apparently lacks the authority to condition the powers of the irrigation district, there are a number of issues and questions that remain unresolved. I recommend the petitioner withdraw his application at this time and resubmit it to Pima County when these issues can be more fully discussed, analyzed and, hopefully, resolved to everyone's satisfaction. With a withdrawal at this time, the \$2,800 bond posted by the petitioner should be returned to him.

Sincerely,



C.H. Huckelberry
County Administrator

P I N A L C O U N T Y

Proposed Redington Irrigation District / Water Conservation District

G R A H A M C O U N T Y

C O C H I S E C O U N T Y



0 1 Mile

Roads

Parcel Boundaries



Proposed Redington Irrigation District
(Boundary from Petition Drawings Rectified to Parcels)



Smallhouse-owned Parcels

Other Affected Parcels



Non-taxcoded Parcel--Roadway



State-owned Parcel



GEOGRAPHIC INFORMATION SYSTEMS

From: Stefanie Smallhouse
To: Maura Kwiatkowski
Cc: Ray Carroll; Jennifer Wong; Michael McNulty; Linda Mayro; Suzanne Shields; Kerry Baldwin; Debra Rodriguez; Tammy Jorde
Subject: RE: Petition for Establishment of the Redington Irrigation and Water Conservation District
Date: Thursday, February 13, 2014 10:17:25 AM
Importance: High

Good Morning,

Given the short time to "meet" concerning those issues brought forward by the RFCD I would like to address them below the best that I can at this time. We also plan to bring this information to the hearing next week should these issues surface at that time.

As I understand the letter, most of the issues relate to an increase in water usage due to a possible decrease in pumping costs. In the last ten years we have converted over 350 acres of farmland from side roll irrigation to center pivot irrigation resulting in at least a 60 % savings in water use on these fields. With this conversion of systems we have actually lost acres under irrigation. We have a clear record of instituting water conservation practices and have for some time. It would be difficult to argue with the fact that we have more to lose from mismanaged water than any other landowner in this area.

Perhaps most relevant to the concerns would be the fact that we are bound by the 2005 Gila River Indian Water Rights Settlement. This settlement instituted restrictions on new irrigation in the Gila River Maintenance Area. In accordance with the settlement we are not permitted to increase the amount of acres under irrigation above those which were irrigated from years 2000-2005 or we violate the settlement. Our fields are monitored by the AZ Dept. of Water Resources to ensure we do not exceed this acreage.

I hope this information is helpful in addressing the concerns brought forth by the RFCD.

Andrew Smallhouse
Bayless and Berkalew Co.

Stefanie A. Smallhouse
DBA Carlink Ranch
23805 E. Redfield Canyon Rd.
Benson, AZ 85602

From: Maura Kwiatkowski [mailto:Maura.Kwiatkowski@pima.gov]
Sent: Monday, February 10, 2014 4:49 PM
To:
Cc: Ray Carroll; Jennifer Wong; Michael McNulty; Linda Mayro; Suzanne Shields; Kerry Baldwin; Debra Rodriguez; Tammy Jorde
Subject: Petition for Establishment of the Redington Irrigation and Water Conservation District

Good afternoon, Mr. Smallhouse.

Attached please find correspondence from the County Administrator regarding your petition in this matter. A hard copy of this correspondence is also being transmitted to you via US Mail.

Regards,
Maura

Maura J. Kwiatkowski
Chief Administrative Assistant to
Pima County Administrator Chuck Huckelberry
130 W. Congress Street, Floor 10
Tucson, Arizona 85701
520.724.8587



COUNTY ADMINISTRATOR'S OFFICE

PIMA COUNTY GOVERNMENTAL CENTER
130 W. CONGRESS, FLOOR 10, TUCSON, AZ 85701-1317
(520) 724-8661 FAX (520) 724-8171

C.H. HUCKELBERRY
County Administrator

February 10, 2014

Mr. Andrew J. Smallhouse
President/Owner, Bayless and Berkalew Company
23805 E. Redfield Canyon Road, #1
Benson, Arizona 85602

**Re: Your January 6, 2014 Petition to the Board of Supervisors to Establish the
Redington Irrigation and Water Conservation District**

Dear Mr. Smallhouse:

Enclosed is a January 30, 2014 memorandum from our Director of Sustainability and Conservation, Linda Mayro, and Parks and Recreation Superintendent Kerry Baldwin. They have reviewed your proposed formation of the Redington Irrigation and Water Conservation District. In reviewing their report, you will see the Regional Flood Control District (RFCD) has some concern regarding the formation of the District, particularly as it relates to potential impacts on shallow groundwaters and riparian areas along the San Pedro River Valley, as well as adverse impacts to riparian areas on County-owned property.

I recommend you contact Ms. Mayro at 520.724.6451 to coordinate a review of your proposal with the RFCD to resolve their concerns in a manner that is acceptable to both you and Pima County. Time is of the essence, as I am having this material emailed you today. You may also have your attorney, if you so desire, contact Deputy County Attorney Michael McNulty at 520.740.5600, who may also be able to provide information and assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "C.H. Huckelberry", is written over a long, sweeping horizontal line.

C.H. Huckelberry
County Administrator

Addressee

Re:

Date

Page

CHH/ anc

Enclosure

**c: The Honorable Ray Carroll, District 4 Member, Pima County Board of Supervisors
Michael McNulty, Deputy County Attorney
Linda Mayro, Director, Sustainability and Conservation
Suzanne Shields, Director, Regional Flood Control District
Kerry Baldwin, Superintendent, Natural Resources, Parks, and Recreation**




Memorandum

Office of Sustainability & Conservation

DATE: January 30, 2014

TO: C.H. Huckelberry, County Administrator

FROM: Linda Mayro, Director, Sustainability & Conservation 
Kerry Baldwin, Superintendent, Natural Resources Parks and Recreation

SUBJECT: Your Memo of January 14, 2014, re. Letter from Mr. Andrew Smallhouse of Carlink Ranch and the Redington Irrigation and Water Conservation District

This memo responds to your request for information regarding the petition to form the Redington Irrigation and Water Conservation District by Mr. Andrew J. Smallhouse of the Carlink Ranch Bayless and Berkalew Co. in the San Pedro Valley. The petition and maps were reviewed by various County staff and departments to address:

- 1) A review of issues associated with forming an irrigation district;
- 2) The correct procedure for completing the establishment of such a district;
- 3) The status of any actions related to the formation of such a district and necessary advertisements and actions by the Board of Supervisors
- 4) Whether there are any County conserved lands within the proposed district and the implications for these lands if they are included in the district.

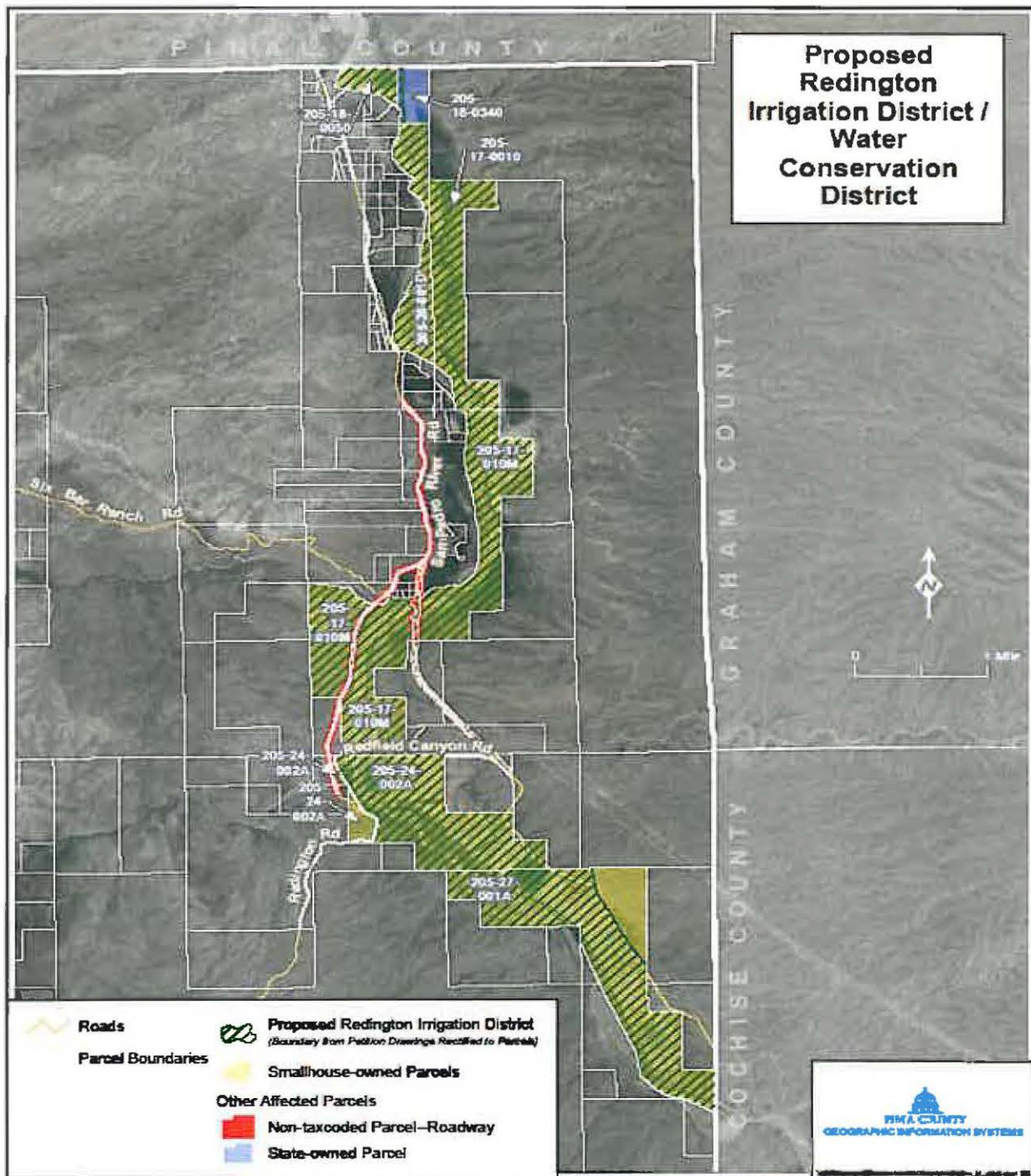
Background:

On January 6, 2014, attorneys for Bayless & Berkalew Company, owned by the Smallhouse family, sent a memo to the Pima County Board of Supervisors and County Attorney regarding a petition to form the proposed Redington Irrigation and Water Conservation District in the San Pedro River Valley in Pima County. The stated purpose of the memorandum was to assist the Board of Supervisors in its consideration of the petition by providing an overview of the legal requirements. Title 48, Chapter 19, Irrigation and Water Conservation Districts of the Arizona Revised Statutes governs the procedures for establishing an irrigation district. This memo further noted the petition is being filed by the only landowner and qualified elector with the proposed district, and suggested that if approved, "the petition serve as a *de facto* election of the only landowner within to the proposed district boundaries" to Board of Directors required for the irrigation district.

The same date, Mr. Andrew Smallhouse sent a letter and form of petition, on behalf of Bayless and Berkalew Co., to District 4 Supervisor, Ray Carroll to form the Redington Irrigation District. Members of the Smallhouse family have owned and operated the Carlink Ranch since 1884, and it is now successfully operated by the 5th generation of family members under the Bayless and Berkalew Co. Mr. Smallhouse notes in his letter that "we have been in business for 130 years and in order to remain sustainable into the future, we must plan for the challenges that lie ahead. One of the challenges is obtaining affordable power.... It is for this reason that we are petitioning the Pima County Board of Supervisors to allow creation of this irrigation district ... to qualify for certain grants ... transitioning to solar power, ... and for access to future wholesale power supplies which

may be available ... only if they are considered such a district. He further notes that applications for this power must be received by March 31, 2014. The January 6, 2014 form of petition was provided to the Clerk of the Board, and a preliminary review of the submittal by the Assessor found that the legal description did not match the map or accurately describe the property owned by the petitioner.

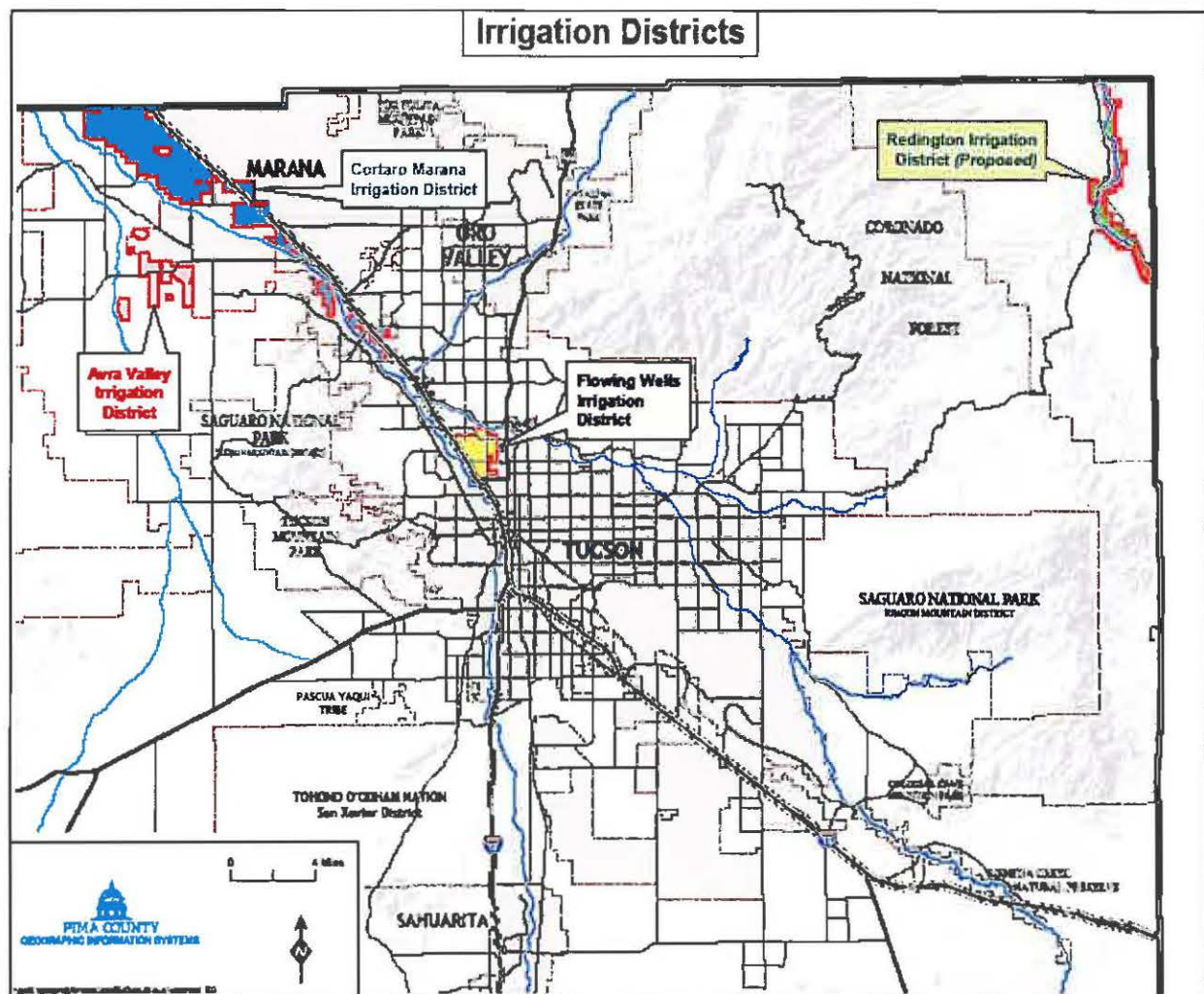
On January 27, 2014, the petition was resubmitted with certain revisions together with the requisite bond. Their petition (Attachment 1) includes only parcels owned by Bayless and Berkalew Co. and the estimated acreage within these boundaries is 3,750 acres shown as hatched green parcels.



The proposed irrigation district lies along the east and west banks of the San Pedro River entirely in Pima County between Cochise County and Pinal County. At present, about 800 acres of pasture for cattle are currently irrigated.

Short window of opportunity for Hoover Power

In meeting with Mr. and Mrs. Smallhouse, we discussed their concerns about the rising costs of electricity to run the ranch wells and pumps, and they saw opportunities to decrease these costs by as much as 25-50 percent. As an irrigation district, they could be considered eligible for grants for solar installation and to contract for wholesale power. The source of this wholesale power will be the allocations and contracts for "Hoover Power" that will be renewed in 2017. Although the Hoover power contracts will be re-allocated in 2017, the Arizona Power Authority is starting now to come up with an allocation process. For the Smallhouse family to be considered eligible to apply, they have to be an Irrigation District by March 31, 2014. While they are not guaranteed a power contract, this will be the only opportunity for many years for new entities to qualify for new 50 year contracts for power. There are currently two other similar cases in Navajo and Apache counties where ranchers are also forming irrigation districts to become eligible for wholesale power. These are apparently the first cases of their kind in the state. At present, the following map shows the existing irrigation districts in Pima County and the proposed Redington district.



Arizona Power Authority and Allocation Process for "Hoover Power"

This section provides additional background on the Arizona Power Authority and the allocation of Hoover Power in 2017. The Arizona Power Authority (the "Authority") is a state agency that is directed to acquire and market electric power output from the mainstream of the Colorado River. The Authority is governed by a commission of five members appointed by the Governor and approved by the Senate. The current commissioners include:

- **Lt. Gen. John Hudson (Chairman)** – retired Lieutenant General in the US Marine Corps.
- **Stephen M. Brophy** (Vice Chair) – Page Land and Cattle Co., President of Arizona Cattle Growers Association, and Chairman of the Mountain States Legal Foundation.
- **Joe Albo** (Commissioner) – Principal Civil Deputy County Attorney in Pinal County.
- **Dalton Cole** (Commissioner) – Co-founder of HoHoKam Irrigation District, served on Central Arizona Water Conservation District Board, Electrical District No.2, and on Ground Water Management Committee for Pinal County.
- **Richard Walden** – President and CEO of Farmers Investment Co. in Sahuarita, Committee chairman for Nutrition Research and Education Foundation.

The Arizona Power Authority (Authority), a body corporate and politic of Arizona, was formed as a result of federal legislation (Boulder Canyon Project Act of 1928) that allocated a portion of power produced from the Boulder Canyon Project (Hoover Dam and Power Plant). Hoover power first became available in 1936, and at that time, the State had not developed an infrastructure and methodology to receive and distribute this allocated power. Subsequently, in 1944, the state of Arizona's Legislature created the Authority (as set forth in Title 30, Arizona Revised Statutes) charging the Authority with acquiring and marketing Arizona's share of Hoover power.

In 1945, the Authority entered a federal contract with the Bureau of Reclamation (Reclamation) for Arizona's share of the Hoover resource and received its first delivery of power in 1951. In 1949, the Authority entered a contract with the Reclamation for an allocation of federal power from Davis Dam. The Davis contract was terminated in 1962, at which time Reclamation entered agreements directly with Arizona preference customers, rather than through the Authority. During the late 1940s, the Authority entered into agreements with Reclamation for transmission of its power allocations over the federal transmission system. In anticipation of load growth and increased power requirements, the Authority also entered into agreements with Arizona Public Service to purchase thermal power from their Saguaro plant and with Reclamation for increased transmission capacity over the federal transmission system. In August of 1977, Western Area Power Administration (Western) became the federal agency responsible for the transmission of federal power and the administration of federal power contracts.

In the late 1970s, Western began developing a new marketing plan for Hoover power to be effective upon expiration of the original 50-year contract (May 1987). The Hoover Power Plant Act of 1984 (1) authorized the Hoover Upgrading Program, the development of visitor facilities, and fixed the amount of contributions to the Lower Colorado River Basin Development Fund for financial assistance of the Central Arizona Project (CAP) and other projects, (2) renewed the Authority's original Hoover allocation (Schedule A contingent capacity and associated firm energy), (3) allocated the long-term Hoover capacity and associated firm energy resulting from the Upgrading Program (Schedule B contingent capacity and associated firm energy), and (4) allocated excess energy (Schedule C energy). To aid in the repayment of the CAP, the 1984 Hoover Power Plant Act also provides for the assessment of .0045 cents per kilowatt-hour on energy generated at Hoover (effective June 1, 1987) and Parker-Davis Project (effective June 1, 2005) sold in Arizona. Title II of this Act also directed Western to implement a Conservation and Renewable Energy program.

The Authority presently has an Electric Service Contract dated June 1987 with Western to receive Arizona's allocation of Schedule A and B power and C energy from Hoover Dam. The Authority

markets and schedules this entitlement to 29 power customers in the state of Arizona consisting of cities and towns, irrigation and electrical districts, and the Central Arizona Water Conservation District, and has worked effectively with both publicly-owned and privately-owned utilities in making Hoover Power Plant hydro power available to all major load centers throughout Arizona at the lowest possible cost.

A specific amount of electrical capacity and firm energy, which will become effective in October 2017, has been allocated to the Power Authority per the Hoover Power Allocation Act of 2011. The Authority has retained Olsson Associates to develop potential methods and a final marketing plan for allocating Hoover power resources post-2017 that has been assigned to the State of Arizona.

ALLOCATION OF HOOVER POWER TO ARIZONA POWER AUTHORITY
CUSTOMERS TABLE 3

Company	Total kW @ Gen	Total kW @ Del	Allocation %	Total KWh @ Gen	Total KWh @ Del	Allocation %
Aguila I.D.	6,290	5,101	1.6684%	12,716,000	12,334,520	1.4821%
Avra Valley I. & D.D.	630	611	0.1671%	2,168,000	2,102,960	0.2527%
Buckeye W.C.D.	2,980	2,891	0.7905%	10,201,000	9,894,970	1.1889%
C.A.W.C.D.	161,600	156,752	42.8847%	182,235,000	176,767,950	21.2398%
Chandler Heights C.I.D.	930	902	0.2467%	3,164,000	3,069,080	0.3688%
Cortaro-Marana I.D.	6,440	6,247	1.7082%	22,003,000	21,342,910	2.5645%
E D #2, Pinal	19,450	18,867	5.1592%	66,473,000	64,478,810	7.7475%
E D #3, Pinal	15,900	15,423	4.2175%	54,351,000	52,720,470	6.3347%
E D #4, Pinal	19,450	18,867	5.1592%	66,473,000	64,478,810	7.7475%
E D #5, Pinal	14,770	14,327	3.9178%	50,476,000	48,961,720	5.8831%
E D #6, Pinal	8,360	8,109	2.2175%	28,579,000	27,721,630	3.3309%
E D #7, Maricopa	10,500	10,185	2.7851%	35,902,000	34,824,940	4.1844%
E D #8, Maricopa	24,200	23,474	6.4191%	57,934,000	56,195,980	6.7523%
Harquahala P.D.	2,490	2,415	0.6605%	8,495,000	8,240,150	0.9901%
Maricopa W.D.	8,840	8,575	2.3448%	30,215,000	29,308,550	3.5216%
McMullen Vly W.C. & D.D.	9,090	8,817	2.4111%	18,944,000	18,375,680	2.2080%
Ocotillo W.C.D.	2,390	2,318	0.6340%	8,175,000	7,929,750	0.9528%
Page	1,040	1,009	0.2759%	1,173,000	1,137,810	0.1367%
Queen Creek I.D.	1,770	1,717	0.4695%	6,043,000	5,861,710	0.7043%
Roosevelt I.D.	3,220	3,123	0.8541%	11,020,000	10,689,400	1.2844%
Roosevelt W.C.D.	6,760	6,557	1.7931%	23,106,000	22,412,820	2.6930%
Safford	2,080	2,018	0.5517%	2,345,000	2,274,650	0.2733%
Salt River Project	38,790	37,626	10.2891%	132,589,000	128,611,330	15.4535%
San Tan I.D.	520	504	0.1379%	1,777,000	1,723,690	0.2071%
Silverbell I.D.	710	689	0.1883%	2,417,000	2,344,490	0.2817%
Thatcher	1,050	1,019	0.2785%	1,185,000	1,149,450	0.1381%
Tonopah I.D.	1,550	1,504	0.4111%	5,297,000	5,138,090	0.6174%
Wellton-Mohawk I.D.	2,910	2,823	0.7719%	9,953,000	9,654,410	1.1600%
Wickenburg	2,290	2,221	0.6074%	2,580,000	2,502,600	0.3007%
Total	377,000	365,860	100.0000%	857,889,000	832,249,330	100.0000%

Requested review by County staff:

1. Issues associated with forming an irrigation district in the San Pedro Valley

The following summarizes a series of questions and review comments by various County staff and departments of certain policy issues, questions, and possible implications of forming an irrigation district in the San Pedro Valley. Because of the environmental sensitivity of the San Pedro River and the possible hydrological effects of irrigation and pumping of ground water, the Regional Flood control District prepared a report on the possible implications of forming an irrigation district.

The highlighted questions were raised by a number of staff in response to the proposed petition, and after research and discussion, the following responses are an attempt to address these questions. However, that said, other questions undoubtedly could be asked and further research is

recommended for a number of questions. Where possible, A.R.S. citations pertaining to Irrigation and Water Conservation Districts are provided to assist in addressing the questions raised.

- 1. Does formation of an irrigation district create a new level of government?** Staff concludes this creates a new level of government as a municipal corporation.

48-2901. District as municipal corporation. All irrigation districts organized under the laws of this state are declared to be municipal corporations for all purposes. Under the laws of this state affecting or relating to irrigation districts such irrigation districts shall be deemed municipal corporations in the construction and application thereof.

- 2. Upon what grounds can the petition be denied by the Board of Supervisors?** The grounds for denial are not specified, but the reasons for denying the petition must be stated.

48-2911. Denial of petition or application. If the board denies the petition or any part thereof, or an application made for any reason, it shall in writing state in detail its reasons therefor which shall be entered upon the records of the board.

- 3. If approved by the Board of Supervisors and the irrigation district is successfully formed, what are the powers of the Board of Directors of an irrigation and water conservation district?** This is addressed directly as defined below.

48-2978. General powers of board of directors. In order to accomplish the purposes of the district the board may:

- 1. Purchase or acquire water rights.*
- 2. Acquire or lease real estate and personal property when necessary.*
- 3. Acquire and hold stock in irrigation ditch and reservoir companies.*
- 4. Lease, sell and otherwise dispose of real estate and personal property.*
- 5. Construct, acquire or purchase canals, ditches, reservoirs, reservoir sites, water, water rights, rights-of-way or other property deemed necessary for the use of the district.*
- 6. Acquire the right to enlarge any ditch, canal or reservoir already constructed or partially constructed.*
- 7. Provide for the construction, operation, leasing and control of plants for the generation, distribution, sale and lease of electrical energy, including sale to municipalities, corporations, public utility districts or individuals of electrical energy so generated.*
- 8. Make appropriations of water for irrigation and power purposes.*
- 9. Refer to the qualified electors of the district any optional or administrative measure or method of procedure or any other matter or proposition the board deems necessary or advisable.*
- 10. Establish tolls or charges for service of irrigation, domestic water, electricity and other commodities.*
- 11. Control the finances and property of the district.*
- 12. Appropriate money and provide for the payment of district debts and expenses.*
- 13. Exercise exclusive control over the laterals, ditches, canals, rights-of-way and other property of the district, prevent encumbering thereof, abate and remove all encumbrances and obstructions thereon, make improvements thereon, vacate any right-of-way not necessary for the further use of the district and protect such right-of-way from encroachment and injuries.*
- 14. Erect and maintain transmission lines and pipelines, culverts, roads and crossways, and prevent obstructions thereon.*
- 15. Provide the district with water, electricity and other public conveniences and necessities, and engage in any and all activities, enterprises and occupations within the powers and privileges of municipalities generally.*
- 16. Apply surplus money in the district treasury to liquidation of district debts or to the creation of a sinking fund pursuant to section 48-2979.*
- 17. Make, amend or repeal resolutions, bylaws and rules necessary for the government of or for carrying into effect the powers vested in irrigation districts or any department or officer thereof, and enforce observance thereof by imposition of penalties. The board may impose penalties not exceeding:*

(a) Five hundred dollars for violations by persons who use water for domestic purposes, as defined in section 45-454.

(b) Five thousand dollars for violations by persons who use water for purposes other than domestic purposes.

4. **Are the assets of the irrigation district tax-exempt and what impact would this cause to County revenues?** Which assets will be transferred to the proposed irrigation district making them tax-exempt are not known at this time. No assessment was made at this time of possible impacts to County revenues.

48-2993. Power of district to hold and use property; tax exemption of property

A. The title to all property acquired by the district under this chapter shall immediately vest in the district in its name, and shall be held by the district for the uses and purposes set forth in this chapter.

B. The district may hold, use or acquire, manage, occupy and possess property as provided by this chapter.

C. The rights of way, ditches, flumes, pipelines, dams, water rights, reservoirs, pumping plants, power plants and other property of like character belonging to an irrigation district shall not be taxed for state, county or municipal purposes.

5. **Could the irrigation district condemn water rights of 3rd parties?** Yes, but compensation would have to be ascertained and paid prior to the district condemning a water right.

48-2902. Taking of waters without compensation prohibited. This chapter shall not be construed as authority to any district or district officers to divert the water of a river, creek, stream, canal or reservoir to the injury or damage of any person or persons having a prior right to such water, prior to such time as the amount of the injury or damage has been ascertained and paid to the party who is injured thereby, in proceedings under the laws of the state relative to the taking of private property for public use

6. **Are irrigation districts intended to benefit only one property owner? And if all the land is owned by the Bayless and Berkalew Co., an Arizona corporation, how can three directors of the district be elected from the qualified electors of the district when a corporation can only cast a single vote?** Staff feels it is unclear whether formation of an irrigation district was intended to benefit the lands of a single property owner.

48-2917. Qualifications of electors; definitions

A. No person shall be entitled to vote at any election, held under the provisions of this chapter unless:

1. He is a holder of title or evidence of title, including receipts or other evidence of the rights of entry-men on lands under any law of the United States or this state, to land in the district, and has possessed such qualifications for ninety days immediately preceding the date of such election.

2. He has resided continuously for six months immediately preceding the election in the county in which the district or a part thereof is located.

3. He is at least eighteen years of age.

4. He is registered as provided by section 48-3015.

B. For the purpose of organization of a new district, the qualifications of electors shall be determined as provided in subsection A of this section, except that subsection A, paragraph 4 of this section shall have no applicability in determining the qualifications of such electors.

C. The administrator or executor of the estate of a deceased person, and the guardian of a minor or incompetent person, appointed and qualified under the laws of the state, may register and cast the vote of the estate or person which he represents. The officer of a corporation who is designated and authorized by a resolution of the board of directors of the corporation may register and cast the vote of the corporation.

7. **Could the Board of Supervisors rewrite the boundaries of the irrigation district so that it only includes lands currently irrigated?** At present, 800 acres (21%) are irrigated out of the estimated 3,750 acres proposed as the Redington irrigation district. Apparently the Board of Supervisors does not have the authority to limit the boundaries.

48-2909. Hearing; determination of district boundaries.

A. If at the time and place of hearing it appears that the petition conforms to the requirements of this article and that the notice of hearing the petition has been given as required by this article, the board shall proceed to hear the matters relating to the organization of the proposed district and shall proceed to define the boundaries and determine the lands to be included in the proposed district and act upon written applications filed for exclusion of lands therefrom, or inclusion of additional lands therein, made in accordance with this chapter. The hearing may be adjourned from time to time, but not to exceed three weeks.

B. After the hearing the board may by final order duly entered refuse or grant the request of the petitioners or any part thereof, and shall therein define and establish the boundaries of the proposed district, designate the lands to be included therein for district purposes and designate the name of the district. The board shall not modify the proposed boundaries described in the petition in such manner as will change the object of the petition, or exempt from the operation of this chapter any land within the boundaries proposed by the petition which is susceptible of irrigation by the same general system of water works proposed as applicable to other lands in the proposed district. Any land which will not in the judgment of the board be benefited by nor be susceptible of irrigation benefits from the proposed system, shall not be included in the district if the owner thereof makes written application at the hearing to exclude such land. In hearing the petition the board shall disregard any informality therein.

- 8. Irrigation districts like Flowing Wells have eventually resulted in urbanization. Given the County's goals to maintain working ranches and provide for habitat conservation, can the district be conditioned to prevent future urban sprawl?**

Staff suggests further research.

- 9. Would its activities be exempt from County zoning laws?**

Staff suggests further research, but Development Services did not raise any issues.

- 10. Bayless and Berkalew Co. currently leases the adjacent County-owned A7 Ranch pursuant to a contract. Does this present any issues?**

Staff suggests further research, but do not think this would be affected.

- 11. Would state laws protecting cultural resources and antiquities still pertain? If the district were formed as a municipal corporation, it appears that the state laws would apply.**

According to the Arizona State Museum, RULES IMPLEMENTING A.R.S. ' 15-1631 AND 41-841, ET SEQ. the Arizona Antiquities Act pertains to State lands defined as: "Lands owned or controlled by the State" means lands owned or controlled by the State of Arizona or by any agency, instrumentality, or political subdivision of the State of Arizona, including any county or municipal corporation.

- 12. How might the irrigation district change the status the San Pedro River road?**

Staff suggests further research, but do not think this would be affected.

- 13. Would the irrigation district be subject to Flood Control District regulations?**

Staff suggests further research, but feels irrigation districts do remain subject to RFCD regulations and would have to acquire any applicable Flood Plain Use Permits.

- 14. If irrigation became more cost-effective, would this result in more ground-water pumping and irrigated land than the current 800 acres in cultivation? And what would be the hydrological effects to the San Pedro River and floodplain?**

To address this question, the Regional Flood Control District prepared the attached memo and report (Attachment 2). This report raises a number of issues:

- a. The formation of the Redington Irrigation District is likely to facilitate groundwater overdraft

- b. Pima County policy is to protect all shallow groundwater areas, and with nearly half of the proposed irrigation district in the recently mapped San Pedro Shallow Groundwater Area, this area is likely to be impacted by pumping.
- c. Pima County has a particular stake in potential impacts to the San Pedro Shallow Groundwater Area because it is a major land-holder and water rights-holder in the area and ground water levels are declining on Pima County property.

RFCD Summary:

The RFCD report concludes that "the formation of the Redington Irrigation Water and Conservation District is not in Pima County's interest. The approval of the proposed Redington Irrigation and Water Conservation District, without condition, may adversely impact the shallow ground water area along the San Pedro, including impacts to riparian habitat on Pima County land, and the water resources below that land."

RFCD Recommendations:

- a. Should the irrigation district be established, apply the conditions for Pima County Resolution 2008-72 Amending Comprehensive Plan Regional Plan Policy 3, Water Resources Element. Section C.1.c "...proposals without physical access to renewable and potable water supply shall not be recommended for approval by staff until such a time as renewable and potable water supply is available in the area, unless it can be shown that the increased water demand projections will not have significant water resource impacts based on staff analysis. Section D.2.g limits pumping near shallow groundwater areas of regional importance.
- b. Should the irrigation district be approved, the district should be required to develop a water conservation plan to demonstrate how it will minimize pumping and improve irrigation efficiency.

2. The procedural steps for the establishment of an irrigation district.

In a memorandum to the Board of Supervisors and County Attorney dated January 6, 2014, David A. Brown of Brown & Brown Law Offices, P.C. outlines the procedures for creating an irrigation and water conservation district. In summary, the procedures are as follows:

- (1) At the time of filing the petition, a bond must be provided to cover the costs incurred by the Board of Supervisors. As of January 27, 2014, the petition to form the Redington Irrigation and Water Conservation District and bond amount of \$2,800 was filed with the Clerk of the Board.
- (2) When the petition is filed and the bond approved, the Board of Supervisors must set a date for a public hearing that is not less three weeks, but not more than seven weeks after the petition is filed. Currently, the Board of Supervisors Addendum for February 4, 2014 includes as Item 5.
- (3) The Board must publish notice of the hearing for two weeks in a local newspaper, and two weeks before the hearing the Board of Supervisors requires the posting of copies of the petition and notice of hearing in three or more conspicuous places in the proposed district.
- (4) Affidavits must be filed with the Board of Supervisors proving that the petition was signed by the petitioners named.
- (5) A hearing will take place at the time and place set by the Board of Supervisors, which may be adjourned from time to time but cannot exceed three weeks.
48-2909. Hearing; determination of district boundaries

A. If at the time and place of hearing it appears that the petition conforms to the requirements of this article and that the notice of hearing the petition has been given as required by this article, the board shall proceed to hear the matters relating to the organization of the proposed district and shall proceed to define the boundaries and determine the lands to be included in the proposed district and act upon written applications filed for exclusion of lands therefrom, or inclusion of additional lands therein, made in accordance with this chapter. The hearing may be adjourned from time to time, but not to exceed three weeks.

- (6) After the hearing, the Board of Supervisors may refuse or grant the request of the petitioners.

B. After the hearing the board may by final order duly entered refuse or grant the request of the petitioners or any part thereof, and shall therein define and establish the boundaries of the proposed district, designate the lands to be included therein for district purposes and designate the name of the district. The board shall not modify the proposed boundaries described in the petition in such manner as will change the object of the petition, or exempt from the operation of this chapter any land within the boundaries proposed by the petition which is susceptible of irrigation by the same general system of water works proposed as applicable to other lands in the proposed district. Any land which will not in the judgment of the board be benefited by nor be susceptible of irrigation benefits from the proposed system, shall not be included in the district if the owner thereof makes written application at the hearing to exclude such land. In hearing the petition the board shall disregard any informality therein.

- (7) If the proposed district is approved, the Board of Supervisors shall call an election, signed by the chair and clerk of the board, of the qualified electors of the proposed district to approve the district and the initial board of directors for the district. The notice and order shall be published once a week for at least three weeks.

48-2916. Notice of election

The board of supervisors shall cause a notice embodying the order in substance, signed by the chairman and clerk of the board, to be issued and published, giving public notice of the organizational election, the time and polling places, and specifying the matters to be submitted to the vote of the electors of the proposed district. The notice and order shall be published once a week for at least three weeks prior to the election in a newspaper of general circulation in the county. If any portion of the proposed district lies within any other county or counties, the notice and order shall be published in a newspaper of general circulation published in each of such counties. A copy of the notice and order shall be posted in at least one conspicuous place in each of the divisions of the proposed district for at least two weeks prior to the date of the election.

- (8) Following the election, the Board of Supervisors shall meet on the second Monday next succeeding the election and canvass the votes cast. If a majority of the votes cast at the election is "yes" the Board shall declare the district organized and issue an order declaring the district to be organized.

48-2921. Canvass of votes; declaration of result; organization of another district including lands of district

A. The board of supervisors shall meet on the second Monday next succeeding the election and canvass the votes cast. If it appears that a majority of the votes cast at the election in the proposed district is "irrigation district, yes," the board shall, by an order entered on its minutes, declare the district organized under the name previously designated, and shall declare the persons receiving the highest number of votes in each division of the district to be duly elected as division directors, declare, for appropriate districts, the two at large candidates receiving the highest number of votes to be duly elected as directors at large and declare the terms of the directors according to the vote received by each. The order shall describe the boundaries of the district and particularly describe the lands finally included therein for district purposes.

B. If the question of vesting the district with the power of drainage has been submitted the board shall declare in the order that the district is either vested or not vested with the power of drainage as determined by its canvass of the votes.

C. The board shall cause a copy of the order, including a map of the district showing the boundaries thereof and lands ordered included therein, duly certified by the clerk of the board of supervisors, to be immediately recorded in the office of the county recorder of each county in which any portion of the lands is located.

D. The board of supervisors of a county in which any portion of the district is located shall not after the date of recording permit the organization of another district including any portion of such lands without consent of the board of directors of the district first including such lands.

3. The status of any actions related to the formation of such a district.

The following identifies actions taken to date related to the formation of such a district and a proposed date for a hearing.

- January 27, 2014 – Petition and bond filed to form the Redington Irrigation and Water Conservation District.
- February 4, 2014 – Board of Supervisors Addendum Agenda Item 5 includes:

Proposed Redington Water Conservation District

Pursuant to A.R.S. §48-2907, regarding the petition to establish the Redington Water Conservation District filed on January 27, 2014, staff requests the following:

- A. Approval of the bond filed by the petitioner in the amount of \$2,800.00;*
 - B. The hearing on the petition be set for February 18, 2014; and*
 - C. Direction be given to the Clerk to have the petition and hearing notice published and posted.*
- February 18, 2014 – At the hearing, the BOS will conduct a hearing on the petition and hear support/opposition and then either adopt a resolution to call the election or not.

4. County conserved lands within the proposed district and the implications for these lands if they are included in the district.

At present there are no County conservation lands located within the proposed district; however, there are County owned conservation lands adjacent to the proposed district. The County's A-7 Ranch comprised of approximately 6,800 acres of fee lands and 34,000 acres of grazing leases adjoin the Bayless and Berkalew Co. Carlink Ranch. In addition, Pima County's Bingham Cienega of about 750 acres lies west of the river and adjacent to the proposed district. While these conservation lands may not be directly affected by the formation of the irrigation district as currently defined, the RFCD raises the issue that additional ground water pumping and future expansion of irrigated fields could adversely impact the Bingham Cienega Shallow Groundwater Area and County water rights and wells along the San Pedro River. The area is already showing declines in the immediate vicinity of Bingham Cienega and any additional pumping is likely to exacerbate the problem.

Summary:

The Bayless and Berkalew Co. propose to form the Redington Irrigation and Water Conservation District and have filed a petition and bond with the Clerk of the Board. The purpose of the formation of the special irrigation district is enable them to participate in federal electrical power opportunities, more specifically to become eligible for Hoover Power and future grants not available to non-district landowners and businesses. Staff have raised a number of questions for consideration, including forming a municipal corporation, possible condemnation of water rights, future urbanization, tax exemption, and expansion of irrigated lands and water pumping, among others. The Regional Flood Control District raises a number of issues regarding potential direct and indirect impacts to County-owned water rights and conservation lands in the San Pedro River Valley.

Attachment 1

**PETITION FOR THE BOARD OF SUPERVISORS OF PIMA COUNTY, ARIZONA TO
ESTABLISH REDINGTON WATER CONSERVATION DISTRICT**

Pursuant to Chapter 19 of Title 48 of Arizona Revised Statutes, the undersigned real property owner ("Petitioner") hereby petitions the Board of Supervisors of Pima County, Arizona ("the County"), to conduct a public hearing on this Petition ("this Petition") and after said hearing, to enter a final order ("Resolution") forming an irrigation and water conservation district and directing Petitioner to hold an election for the formation of an irrigation and water conservation district and for the election of the district's initial board of directors.

1. Petitioner proposes to organize an irrigation and water conservation district to be named "Redington Water Conservation District" ("the District").
2. The District is necessary to provide water and acquire power at a reasonable cost.
3. The District will maintain all existing improvements, including easements and right-of-ways, which are used to serve water, at a reasonable cost, to property within the District's boundaries and to adjacent lands having contracts with the District, thus benefitting public convenience and welfare. If necessary, the District will also construct new improvements or replace the existing improvements that are used to provide power to operate groundwater wells and other facilities in order to distribute and serve water, at a reasonable cost, to property within the District's boundaries and to adjacent lands having contracts with the District.
4. Petitioner proposes that the District's boundaries within the County are delineated by legal descriptions in Exhibit A and as set forth in maps attached as Exhibit B. The estimated acreage within these boundaries is Three Thousand Seven Hundred and Fifty (3,750) acres.
5. The improvements include all existing facilities and facilities that may be constructed in the future that are necessary to provide water for the land within the boundaries of the District and to adjacent lands that have water delivery contracts with the District. These facilities may include, but are not limited to, wells, pumps, ditches, pipelines, electrical power lines and distribution equipment, easements, right-of-ways and water treatment facilities.
6. The District shall be a special purpose county improvement district and a municipal corporation for all applicable purposes.

7. Petitioner acknowledges that the formation of the District may result in the levy of ad valorem taxes, assessments and other charges to pay the costs of improvements constructed or acquired by the District and for their operation and maintenance, and that the Property and its owners will be subject to the ordinances, resolutions and other laws of the District. Petitioner also understands and consents that taxes may be levied on a square footage basis.
8. The only owner of all land within the proposed boundaries of the District is named as Petitioner and has signed this Petition. There are no other owners of land within the boundaries of the proposed District other than the Petitioner. In the future, additional lands may be added to the proposed District, but only with the consent of the owner(s) of such additional lands.
9. Petitioner requests that the Board of Supervisors direct Petitioner to conduct an election by all landowners within the proposed district to consider the approval of the formation of the District and electing a three-member Board of Directors (herein so called) who will be elected on an at-large basis pursuant to A.R.S. §48-2915 because the proposed district acreage is less than ten thousand (10,000) acres.
10. Pursuant to A.R.S. § 48-2906(A), Petitioner will provide a cash bond in an amount of Five Hundred Dollars (\$500), as required by the Board of Supervisors.
11. Pursuant to A.R.S. § 48-2907, Petitioner requests that the Board of Supervisors set a hearing on this Petition within three to seven weeks of the date that this Petition is filed.
12. Pursuant to A.R.S. § 48-3041(A), Petitioner requests that the Board of Supervisors order that the voting in the District be done on an acreage basis.
13. Petitioner, which is the only current qualified elector of the proposed district, requests that the Board of Supervisors include the following names on the ballot for the Board of Directors of the District:

Mary G. Smallhouse

10805 North San Pedro River Road
Benson, Arizona 85602

Andrew J. Smallhouse

23805 East Redfield Canyon Road
Benson, Arizona 85602

David C. Smallhouse

Post Office Box 31597
Tucson, Arizona 85751-1597

All of the proposed directors are officers, directors or representatives of Petitioner, which is the sole owner of the property within the proposed boundaries of the District. Thus, all are qualified to serve on the Board of Directors of the District pursuant to A.R.S. § 48-2917. Furthermore, each proposed director is a resident of Pima County, Arizona.

14. Petitioner, which is the only landowner within the proposed District, requests that after the public hearing, the Board of Supervisors direct Petitioner to conduct an election concerning the formation of the proposed District and an election of the initial Board of Directors of the District as soon as legally possible.

WHEREAS, the Petitioner represents and understands that this Petition constitutes a binding obligation and that this Petition has been validly authorized and executed.

WHEREAS, this Petition is signed by the only entity owning real property within the proposed District boundaries, representing all possible electors and all possible property owners.

THEREFORE, Petitioner requests that this Petition be properly filed as provided by law, that the Board of Supervisors orders a hearing on this Petition and after the hearing has been conducted as provided by law, that the Board of Supervisors approves the formation of Redington Water Conservation District; and

THEREFORE, Petitioner further requests that after the approval of the formation of Redington Water Conservation District, that the Board of Supervisors direct the sole Petitioner to conduct an election concerning the formation of the District and the initial Board of Directors that is satisfactory to the Board of Supervisors, and that the Board of Supervisors orders the establishment of the District.

SUBMITTED BY the party listed below, representing the only landowner within the proposed District.

SIGNATURE OF LANDOWNER

BAYLESS & BERKALEW COMPANY,
an Arizona corporation

Signed Jan. 23, 2014

By: Andrew J. Smallhouse
Andrew J. Smallhouse, President

**PETITION FOR THE BOARD OF SUPERVISORS OF PIMA COUNTY, ARIZONA TO
ESTABLISH REDINGTON WATER CONSERVATION DISTRICT**

EXHIBIT "A"

Approximately 3,7500 acres, described as follows:

Property of Bayless & Berkalew Co. in T11S-R18E, Pima County, Arizona:

- Section 2: Portions of the West side of SW Quadrant;
- Section 3: ~~Portions of the NW and NE Quad to the West bank of the San Pedro River,~~ *Excluded*
Eastside of the SE Quad to the West Bank of the San Pedro River;
- Section 10: Portions of the East side of the East ½ ;
- Section 11: Portions of the West ½;
- Section 14: Portions of the West ½ to the West Bank of the San Pedro River;
- Section 15: Portions of the NE Quad. to include to the West Bank of the San Pedro River;
- Section 23: Portions of the East ½ of the NW Quad. to the West Bank of the San Pedro River, Portions of the West ½ of the NE Quad., Portions of the East ½ of the SW Quad., Portions of the West ½ of the SE Quad.;
- Section 26: Portions of the NW Quad. to the West Bank of the San Pedro River, portions of the SW Quad to the West Bank of the San Pedro River;
- Section 27: Portions of the South ½ ; and
- Section 34: The NW Quad., Portions of the SW Quad to the West Bank of the San Pedro River, Portions of the West ½ of the SE Quad.

Property of Bayless & Berkalew Co. in T12S-R18E, Pima County, Arizona:

- Section 2: Portions of the West ½ of the NW Quad., the SW Quad., portions of the SE Quad.;
- Section 3: Portions of the NE Quad., portions of the SE Quad.;
- Section 11: Portions of the North ½ ;
- Section 12: Portions of the West ½ to the West Bank of the San Pedro River; *Excluding Cochise County*
- Section 13: Portions of the East side of the NW Quad. to the West Bank of the San Pedro River, Portions of the NE Quad., portions of the SE Quad. to the West Bank of the San Pedro River.

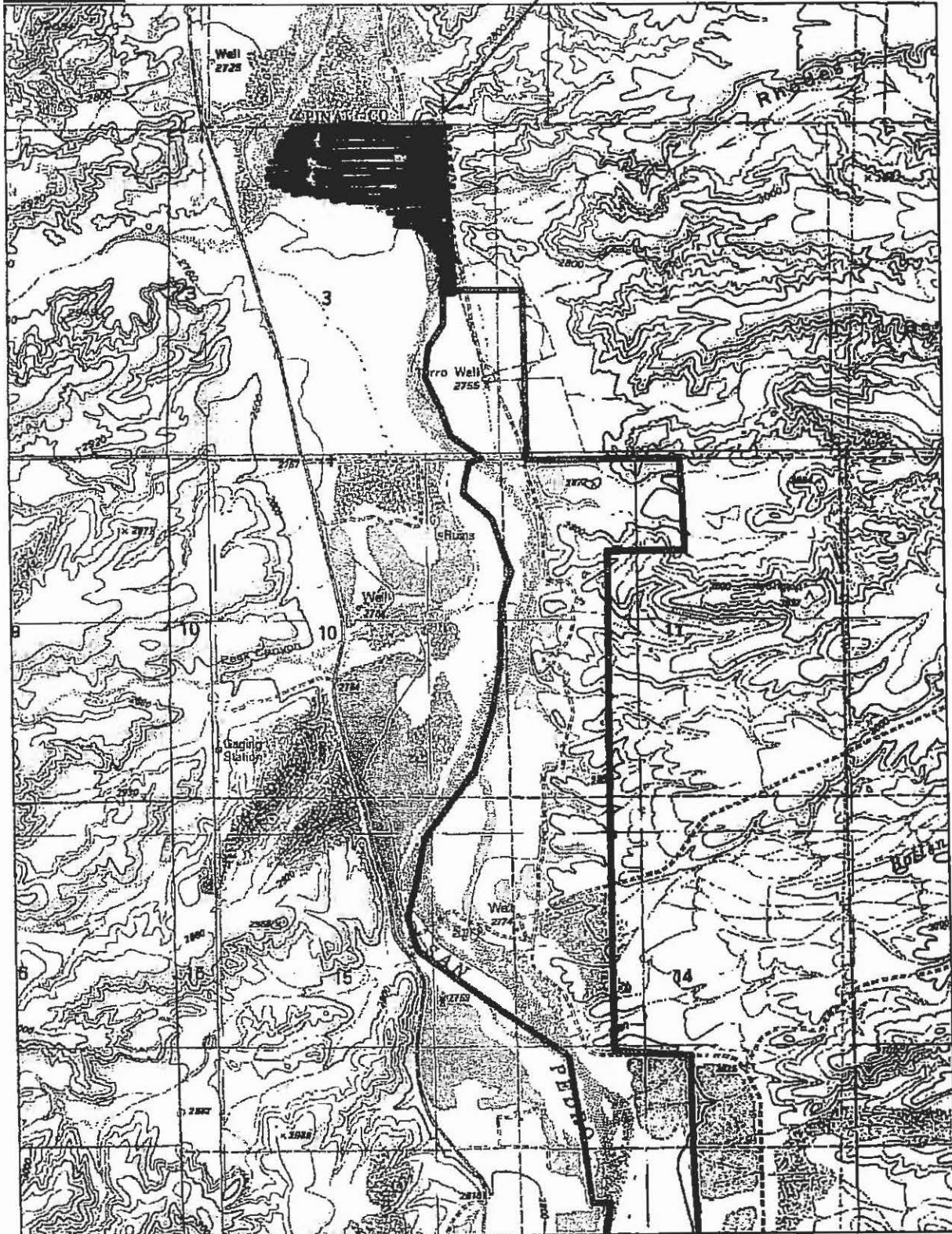
~~~ End of Exhibit "A" ~~~

**PETITION FOR THE BOARD OF SUPERVISORS OF PIMA COUNTY, ARIZONA TO  
ESTABLISH REDINGTON WATER CONSERVATION DISTRICT**

**EXHIBIT "B"**

**Maps Depicting the Approximately 3,750 Acres of Land  
Described in Exhibit "A"**

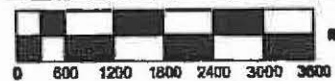




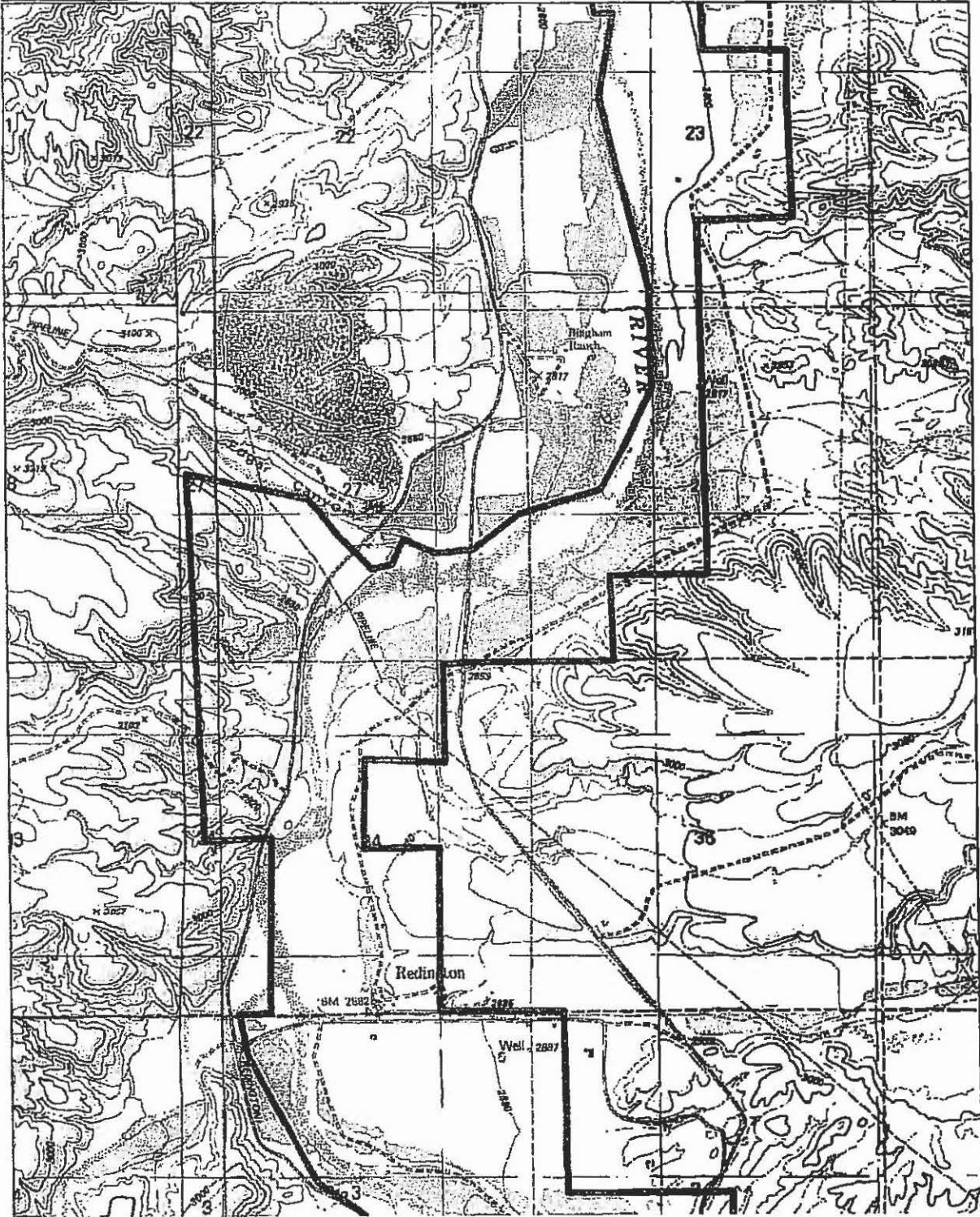
Data was subject to license.

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Data Zoom 12-1













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# MEMORANDUM

## Planning & Development

### Regional Flood Control District

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DATE: January 30, 2014

TO: Linda Mayro  
Office of Sustainability and Conservation

FROM: Evan Canfield, PE  
Frank Postillion  
David Scalero

HEC

SUBJECT: Formation of the Redington Irrigation and Water Conservation District (RIWCD)

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**Background:** Chuck Huckelberry sent us a request to review the following items for the proposed Redington Irrigation and Water Conservation District:

- 1.) Review of the Issues associated with such a water district and whether the County would or would not be in favor of same
- 2.) An appropriate plan to complete the establishment of such a district in a correct and proper manner, and
- 3.) The current status of any actions related to the formation of the district, such as necessary advertisements or hearings before the Board of Supervisors.

**Scope:** This memo addresses items 1 and 2 above from a water resources perspective.

**1.) Review of the Issues:**

***a. Our evaluation suggests that the formation of the RIWCD will facilitate groundwater overdraft as indicated by the following:***

- i. Evaluation of Air Photo Data Suggests Increased acreage under irrigation on the Bayless and Burkalew holdings since 2002 (*Attachment A* prepared by Julia Fonseca).
- ii. The stated goal of formation of the district is to allow the owners of Bayless and Burkalew to obtain cheaper energy for operating their irrigation wells. Being able to pump water at a cheaper rate would be an incentive for Bayless and Burkalew to pump more water, thus resulting in groundwater overdraft.
- iii. Because the proposed irrigation district is outside an AMA, the safe yield target (or other targets) do not apply. Furthermore, there is no requirement to have an active

conservation plan. As such, there is no restriction on the volume of pumping from existing water rights. Furthermore, there is no requirement to meter the water pumped.

***b. Pima County Policy is to protect all Shallow Groundwater Areas including this one along the San Pedro. Issues are as follows:***

- i. Approximately half of the proposed RIWCD is in the recently-mapped San Pedro Shallow Ground Water Area (PAG 2012; see map), which is likely to be impacted by pumping.
- ii. Pima County has stated an intent to “to protect the groundwater-dependent ecosystems of Pima County including springs, perennial and intermittent systems and shallow groundwater areas.” (Pima County Resolution 2008-72, Amending Comprehensive Plan Regional Plan Policy 3, Water Resources Element, for all of Pima County. Section A Policy Intent.)

***c. Pima County has a particular stake in potential impacts to the San Pedro Shallow Groundwater Area because it is a major landholder, and water rights holder in this area, and water levels are declining on Pima County property.***

- i. Pima County owns approximately 750 acres of land along the San Pedro adjacent to the proposed RIWCD, much of it in the San Pedro Shallow Ground Water Area (see map).
- ii. Pima County has surface water rights and wells along the San Pedro that may be impacted by pumping in the shallow ground water area (Attachment B-). Our evaluation showed declines of approximately 1.5'/yr in the immediate vicinity of the Bingham Cienega (Attachment C-maps table and graph).
- iii. Board of Supervisors Policy C2.1 *Workplace Ethics, Conduct and Compliance* indicates that the County's best interests and the benefit of the largest number of people need to be considered.
  2. *Making decisions in the County's best interests and/or withdrawing yourself from the decision-making process when a decision puts your personal interests in competition with the interests of the County;*
  3. *When a decision could benefit a large number of people as opposed to a small group of individuals, making a decision that favors the larger group;*

**Summary of the Issue: Our evaluation is that formation of the RIWCD is not in Pima County's interest.** The approval of the proposed Redington Irrigation and Water Conservation District, without condition, may adversely impact the shallow ground water area along the San Pedro, including impacts to riparian habitat on Pima County land, and the water resources below that land.



**2.) An appropriate plan to complete the establishment of such a district in a correct and proper manner.**

- a. Should the RIWCD be established, we would recommend that it abide by the conditions for Pima County Resolution 2008-72, Amending Comprehensive Plan Regional Plan Policy 3, Water Resources Element, which lays out a method for evaluating and mitigating effects to ground water as follows:***

*Section C.1.c. ....proposals without physical access to renewable and potable water supply shall not be recommended for approval by staff until such a time as renewable and potable water supply is available in the area, unless it can be shown that the increased water demand projections will not have significant water resource impacts based on staff analysis ..*

Those issues include: Water service and renewable water supply options; Current and projected depth to groundwater and groundwater trend data; proximity to areas of known or potential ground subsidence; **proximity to known groundwater-dependent ecosystems** (our emphasis); and location within a hydrogeologic basin, including depth to bedrock.

*Section D. 2. Management tools may be used in moving towards a more sustainable water future*

***g. Limit pumping near shallow groundwater areas of regional importance-***  
*Method for implementing this strategy include land use controls and the purchase of development and water rights.*

**Suggested Plan: Should the Board of Supervisors choose to approve the RIWCD, staff suggests that RIWCD should be required to develop a water conservation plan.** For rezoning, the *Water Resources Element* emphasizes the applicant must develop an Integrated Water Management Plan to be approved by staff. In this case of an application for an Irrigation District, the applicant should develop a water conservation plan to demonstrate how it will minimize pumping and improve irrigation efficiency so as to minimize harm to the adjacent Bingham Cienega Shallow Groundwater Area (SGWA).

**References:**

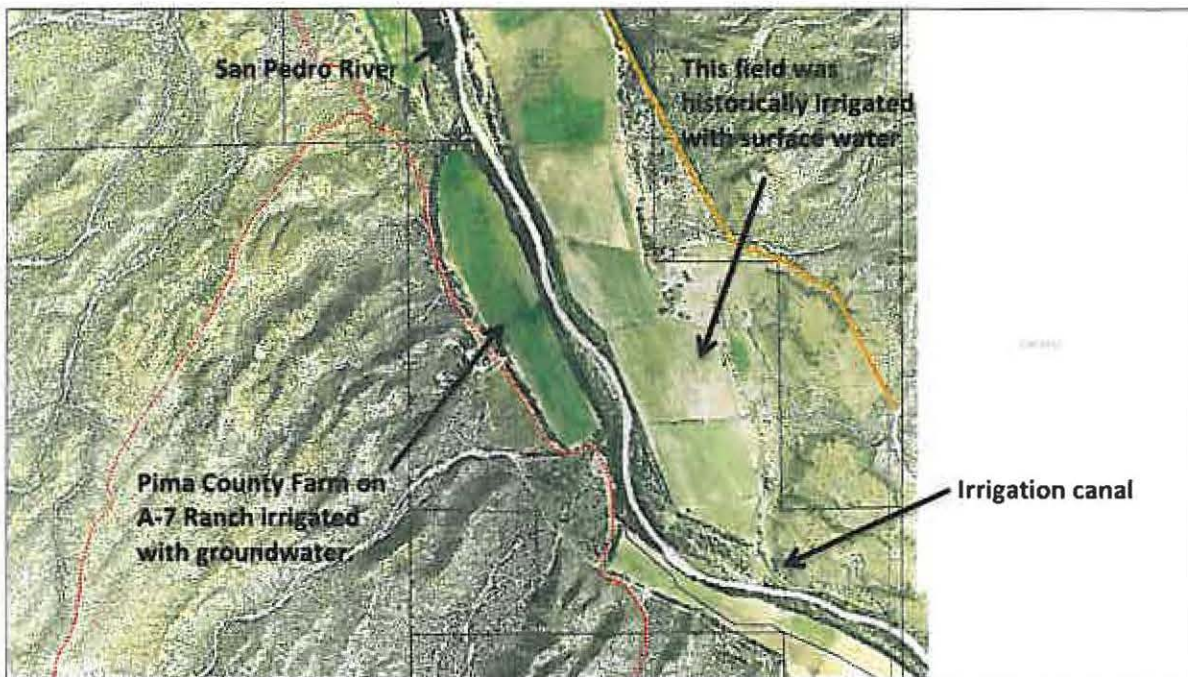
Pima Association of Governments. 2012. *Shallow Groundwater Areas in Eastern Pima County, Arizona: Water Well Inventory and Pumping Trend Analysis*. 117p

Attachment A – Comparison of Area  
Under Irrigation in 2002 and 2010



Northern agricultural fields along San Pedro River, Pima County. Top photo: Pima Association of Governments Orthophoto, 2002. Bottom photo: USDA NAIP 2010.





Southern agricultural fields along San Pedro River, near Cochise County line. Top photo: Pima Association of Governments Orthophoto, 2002. Bottom photo: USDA NAIP 2010.



ATTACHEMENT B: PIMA COUNTY PIMA COUNTY FLOOD CONTROL DISTRICT WELLS AND WATER RIGHTS ALONG THE SAN PEDRO RIVER, PIMA COUNTY, ARIZONA

Water Rights Filings and State Adjudication Statements of Claimant

| PROGRAM | APPLI NO | PRIOR DATE | HLDR NAME                 | WATER RIGHT                   | RIGHT NO   | QUANTITY     | USE1      | USE2                                   | USE3                       | USE4 |
|---------|----------|------------|---------------------------|-------------------------------|------------|--------------|-----------|----------------------------------------|----------------------------|------|
| 38      | 18307    | 12/31/1987 | PIMA COUNTY               | PIETY MOUNTAIN                | PIETY HILL | D12018030CA0 | POD, POU, | 0.5 ACRE FEET PER ANUM for LIVESTOCK   | RECREATION & WILDLIFE      |      |
| 39      | 2050     |            |                           |                               |            |              |           |                                        |                            |      |
| 33      | 78568    | 6/28/1979  | PIMA COUNTY FLOOD CONTROL | SENECA SPRING BINGHAM CIENEGA |            | D11018023CB0 | POD, POU, | 0.54 ACRE FEET PER ANUM for STOCKWATER | USE for 40 COWS            |      |
|         |          |            |                           |                               |            | D11018023C00 |           |                                        |                            |      |
| 36      | 27655    | 12/31/1906 | PIMA COUNTY FLOOD CONTROL | SENECA SPRING BINGHAM CIENEGA |            | D11018026BB0 | POD, POU, | 1.15 ACRE FEET PER ANUM for STOCKWATER |                            |      |
| 39      | 2772     |            |                           |                               |            |              |           | 1.810 ACRE FEET PER ANUM               | BASED ON 2.5 CFS FLOW RATE |      |

Well Location/Description

| WELL # | GWRI #          | OWNER ID             | OWNER                     | CADASTRAL     | WELL TYPE | WELL DATE | WELL DEPTH (FT) | WELL DEPTH (FT) | WELL DEPTH (FT) | WELL DEPTH (FT) | WELL DEPTH (FT) |
|--------|-----------------|----------------------|---------------------------|---------------|-----------|-----------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 608229 | 323010110250801 | Toro Well            | Bayless & Berkalew Co     | D-11-18-03DAA | E         | 10        | 90              | 6               | 20.9            | 11/13/2006      |                 |
| 608232 |                 |                      | Bayless & Berkalew Co     | D-11-18-15ABD | E         | 14        | 19              | 7               | 6               | 1/1/1943        |                 |
| 608222 |                 |                      | Bayless & Berkalew Co     | D-11-18-15ADB | NE        | 500       | 22              | 24              | 4               | 1/1/1945        |                 |
| 608215 | 322851110291001 |                      | Bayless & Berkalew Co     | D-11-18-15ADA | NE        | 1350      | 120             | 16              | 27              | 10/30/1950      |                 |
| 607227 | 322736110283601 |                      | Bayless & Berkalew Co     | D-11-18-230BB | NE        | 1250      | 70              | 20              | 8               | 3/8/1984        |                 |
| 608221 |                 |                      | Bayless & Berkalew Co     | D-11-18-230BB | NE        | 2250      | 30              | None            | 3               | 4/16/1977       |                 |
| 608228 | 322718110283201 |                      | Bayless & Berkalew Co     | D-11-18-26BAA | E         | 12        | 100             | 6               | 24.4            | 11/8/2006       |                 |
| 598121 |                 |                      | Bayless & Berkalew Co     | D-11-18-27DDD | NE        |           | 115             | 16              | 72              | 6/13/2003       |                 |
| 608234 |                 |                      | Bayless & Berkalew Co     | D-11-18-34ADD | E         | 30        | 150             | 6               | 70              | 1/1/1932        |                 |
| 608226 |                 |                      | Bayless & Berkalew Co     | D-11-18-34DBA | E         | 11        | 120             | 6               | 45              | 1/1/1940        |                 |
| 608233 |                 |                      | Bayless & Berkalew Co     | D-11-18-34CDA | E         | 11        | 75              | 6               | 48              | 1/1/1940        |                 |
| 608227 |                 |                      | Bayless & Berkalew Co     | D-11-18-34DCD | E         | 11        | 150             | 6               | 74              | 1/1/1945        |                 |
| 608217 | 322534110250801 |                      | Bayless & Berkalew Co     | D-12-18-03AAA | NE        | 1350      | 127             | 16              | 48.8            | 11/8/2006       |                 |
| 608219 | 322535110250901 | Old House Ranch Well | Bayless & Berkalew Co     | D-12-18-03AAA | NE        | 1000      | 101             | 16              | 45.5            | 11/8/2006       |                 |
| 624852 | 322705110285401 | Kelly Well           | Pima County Flood Control | D-11-18-26BCA | NE        | 2500      | 80              | 18              | 28.06           | 6/20/2013       |                 |
|        |                 | Top Well             | Pima County Flood Control | D-11-18-27DAB | E         |           |                 |                 | 44.66           | 3/28/2013       |                 |
|        |                 | Rhodes Well          | Pima County Flood Control | D-11-18-27ACC | E         |           |                 |                 | 50.11           | 6/20/2013       |                 |

ATTACHEMENT B PIMA COUNTY PIMA COUNTY FLOOD CONTROL DISTRICT WELLS AND WATER RIGHTS ALONG THE SAN PEDRO RIVER, PIMA COUNTY, ARIZONA

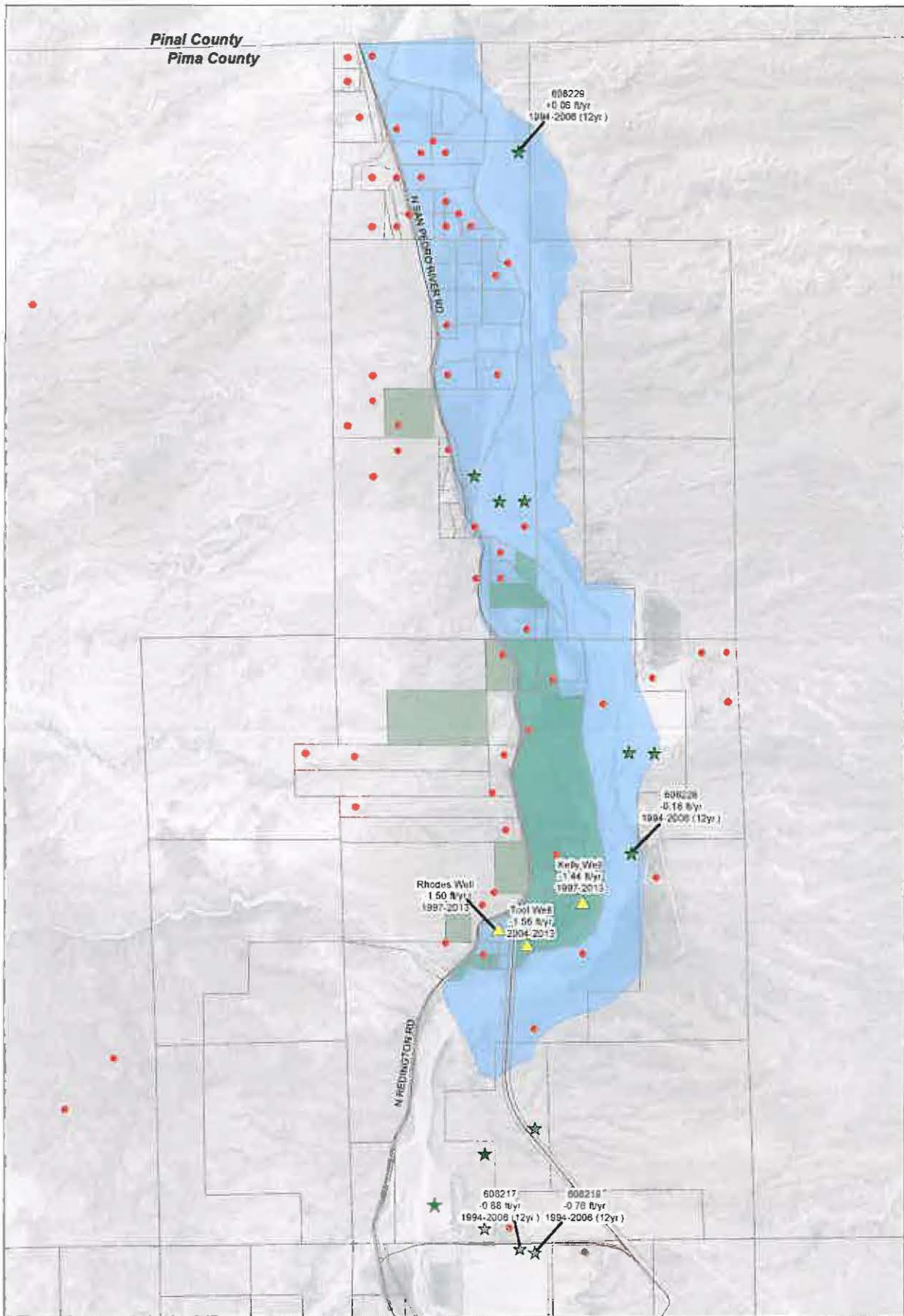
Water Rights Filings and State Adjudication Statements of Claimant

| PROGRAM | APPLI. NO. | PRIOR. DATE | HOLDER NAME               | WATER RIGHT                   | PROPERTY   | DECLARATION  | USE1      | USE2                                    | USE3                       | USE4 |
|---------|------------|-------------|---------------------------|-------------------------------|------------|--------------|-----------|-----------------------------------------|----------------------------|------|
| 38      | 18307      | 12/31/1967  | PIMA COUNTY               | PIETY MOUNTAIN                | PIETY HILL | D12018030CA0 | POD. POU. | 0.5 ACRE FEET PER ANNUM for LIVESTOCK   | RECREATION & WILDLIFE      |      |
| 33      | 78568      | 8/28/1979   | PIMA COUNTY FLOOD CONTROL | SENECA SPRING BINGHAM CIENEGA |            | D11018023CB0 | POD. POU. | 0.54 ACRE FEET PER ANNUM for STOCKWATER | USE for 40 COWS            |      |
| 36      | 27655      | 12/31/1906  | PIMA COUNTY FLOOD CONTROL | SENECA SPRING BINGHAM CIENEGA |            | D11018023C00 | POD. POU. | 1.15 ACRE FEET PER ANNUM for STOCKWATER |                            |      |
| 39      | 2772       |             |                           |                               |            | D11018026BB0 |           | 1.810 ACRE FEET PER ANNUM               | BASED ON 2.5 CFS FLOW RATE |      |

Well Location/Description

| WELL # | QWD #           | OWNER ID             | OWNER                     | CADASTRAL     | WELL TYPE | DEPTH (FEET) | SEALED DATE | CAPACITY (GPM) | WATER LEVEL (FEET) | TESTED LEVEL DATE |
|--------|-----------------|----------------------|---------------------------|---------------|-----------|--------------|-------------|----------------|--------------------|-------------------|
| 608228 | 323010110290801 | Torro Well           | Bayless & Berkalew Co     | D-11-18-03DAA | E         | 10           | 90          | 6              | 20.9               | 11/13/2006        |
| 608232 |                 |                      | Bayless & Berkalew Co     | D-11-18-15ABD | E         | 14           | 19          | 7              | 6                  | 1/1/1943          |
| 608222 |                 |                      | Bayless & Berkalew Co     | D-11-18-15ADB | NE        | 500          | 22          | 24             | 4                  | 1/1/1945          |
| 608215 | 322551110291001 |                      | Bayless & Berkalew Co     | D-11-18-15ADA | NE        | 1350         | 120         | 16             | 27                 | 10/30/1950        |
| 607227 | 322738110283801 |                      | Bayless & Berkalew Co     | D-11-18-23DBB | NE        | 1250         | 70          | 20             | 8                  | 3/8/1984          |
| 608221 |                 |                      | Bayless & Berkalew Co     | D-11-18-23DBB | NE        | 2250         | 30          | None           | 3                  | 4/16/1977         |
| 608228 | 322718110283201 |                      | Bayless & Berkalew Co     | D-11-18-26BAA | E         | 12           | 100         | 6              | 24.4               | 11/8/2006         |
| 598121 |                 |                      | Bayless & Berkalew Co     | D-11-18-27DDD | NE        |              | 115         | 16             | 72                 | 6/13/2003         |
| 608234 |                 |                      | Bayless & Berkalew Co     | D-11-18-34ADD | E         | 30           | 150         | 6              | 70                 | 1/1/1932          |
| 608226 |                 |                      | Bayless & Berkalew Co     | D-11-18-34DBA | E         | 11           | 120         | 6              | 45                 | 1/1/1940          |
| 608233 |                 |                      | Bayless & Berkalew Co     | D-11-18-34CDA | E         | 11           | 75          | 6              | 48                 | 1/1/1940          |
| 608227 |                 |                      | Bayless & Berkalew Co     | D-11-18-34CDD | E         | 11           | 150         | 6              | 74                 | 1/1/1945          |
| 608217 | 322534110290801 |                      | Bayless & Berkalew Co     | D-12-18-03AAA | NE        | 1350         | 127         | 16             | 48.8               | 11/8/2006         |
| 608219 | 322535110290901 | Old House Ranch Well | Bayless & Berkalew Co     | D-12-18-03AAA | NE        | 1000         | 101         | 16             | 45.5               | 11/8/2006         |
| 624852 | 322705110285401 | Kelly Well           | Pima County Flood Control | D-11-18-26BCA | NE        | 2500         | 80          | 18             | 28.06              | 6/20/2013         |
|        |                 | Toot Well            | Pima County Flood Control | D-11-18-27DAB | E         |              |             |                | 44.66              | 3/28/2013         |
|        |                 | Rhodes Well          | Pima County Flood Control | D-11-18-27ACC | E         |              |             |                | 50.11              | 6/20/2013         |

# Attachment C: San Pedro River Water Level Trends



Pima County Engineer & Flood Control District  
100 N. Congress Ave., Suite 100  
Tucson, Arizona 85701-2000  
Tel: 520-795-1000 Fax: 520-795-1001  
Web: www.pima.gov

This information is provided as a service to the public. It is not intended to be used for legal purposes. The information is provided as a service to the public. It is not intended to be used for legal purposes. The information is provided as a service to the public. It is not intended to be used for legal purposes.

This project is supported by the City of Tucson and the Pima County Flood Control District.

- Registered Wells
- Pima County Wells
- Bayless & Bartlett Wells

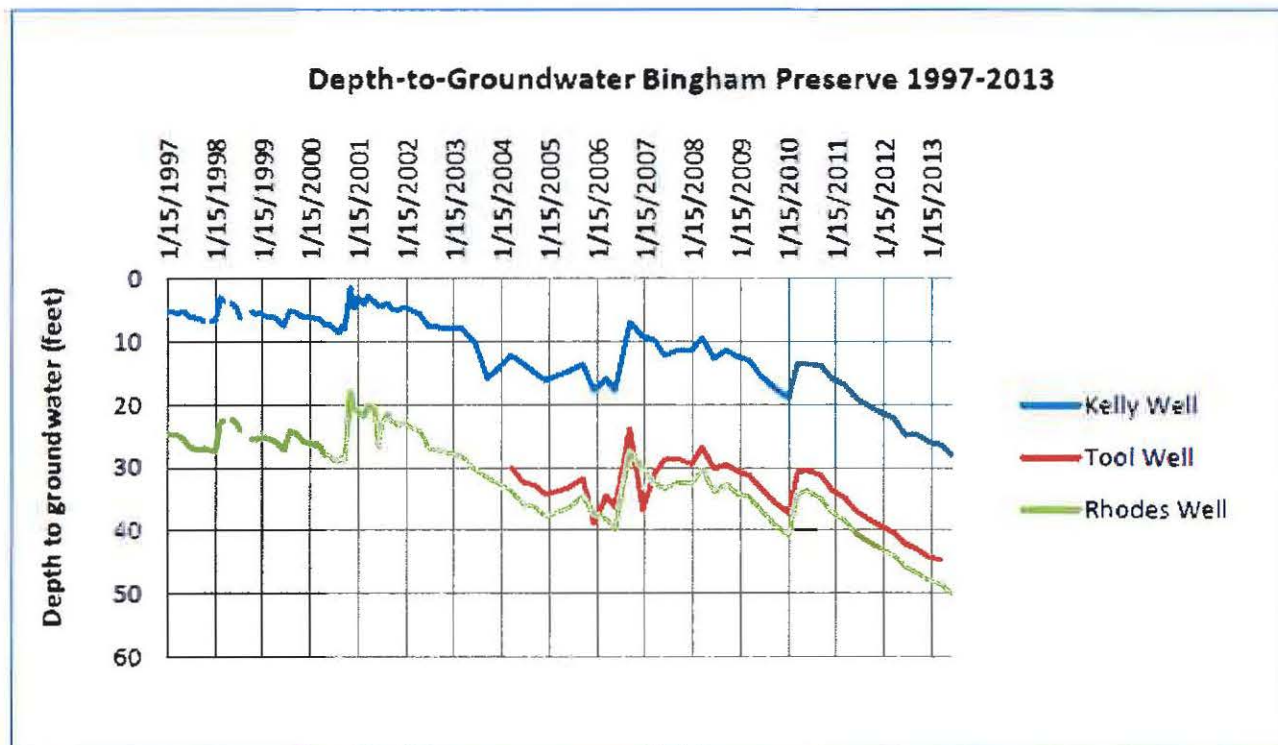
- Parcels
- Pima County Owned Parcels
- Shallow Groundwater Area



1 inch = 2,383 feet

Date: 1/29/2014

ATTACHMENT C





**ATTACHMENT C: SAN PEDRO RIVER WATER LEVEL TRENDS TABLE**

| Wells55 # | Cadastral     | Time Period          | Total Change<br>(feet) | Annual Change<br>(feet/year) |
|-----------|---------------|----------------------|------------------------|------------------------------|
| 608229    | D-11-18-03DAA | 1994-2006 (12 years) | +0.7                   | +0.058                       |
| 608228    | D-11-18-26BAA | 1994-2006 (12 years) | -2.1                   | -0.175                       |
| 624852    | D-11-18-26BCA | 1997-2013 (16 years) | -23                    | -1.438                       |
| ??????    | D-11-18-27DAB | 2004-2013 (9 years)  | -14                    | -1.555                       |
| ??????    | D-11-18-27ACC | 1997-2013 (16 years) | -24                    | -1.500                       |
| 608217    | D-12-18-03AAA | 1994-2006 (12 years) | -10.5                  | -0.875                       |
| 608219    | D-12-18-03AAA | 1994-2006 (12 years) | -9.1                   | -0.758                       |