

January 16<sup>th</sup>, 2020 Meeting Minutes

Moscow, UI Facilities Services Center, Jacks Creek Meeting Room, 2PM

### Attendance

	UI: Alan Kolok, IWRRI, Director	X	WSU: Jeff Lannigan, Facilities Services
X	UI: Eugene Gussenhoven, Utilities & Engineering Director		WSU: Jason Sampson, Assistant Director, Environmental Services
X	Moscow: Tyler Palmer, Deputy Director Operations	X	Pullman: Cara Haley, City Engineer
	Moscow: Anne Zabala, City Council Member	X	Pullman: Kevin Gardes, Director of Public Works
	Moscow: Mike Parker Water Utility Manager		Pullman: Eileen Macoll, City Council Member
X	Latah County: Paul Kimmell (Chair), Citizen/County Representative		Whitman County: Mark Storey, Public Works Director/County Engineer
	Latah County: Tom Lamar, County Commissioner	X	Whitman County: Art Swannack, County Commissioner

### Visitors and Others:

Douglas Jones, IDWR; Colt Shelton, JUB; Kyle Duckett, Alta Science and Engineering; Tom Jenkins, Alta Science and Engineering; Zena Hartung, Alta Science and Engineering; Alex Maas, Presenter.

Action items indicated by: \*\*

Action items where vote is required indicated by: \*\*\*

### Call to Order:

Paul Kimmell called the meeting to order at 2:03 PM. Kimmell conducted introductions.

### 1) Approval of December 19<sup>th</sup>, 2019 Meeting Minutes

Tyler Palmer made a motion to approve December 19<sup>th</sup>, 2019 meeting minutes as presented to the committee. The motion was second by Eugene Gussenhoven. \*\*\*December 2019 meeting minutes were approved by consensus.

Note: These minutes are preliminary drafts and have not been reviewed for correctness or completeness by members of PBAC.

## 2) Public Comment for Items not on Agenda: None

## 3) Presentations/Discussion:

- **Palouse Basin Survey Project Update: Alex Maas/Koroles Nader Nakhla Ataalla Awad (Kiro)** – Kiro shared PowerPoint Slides (attached below) with results from the Palouse Basin Survey. Alex and Kiro reported that generally speaking, people were in favor of a Palouse water alternative that would utilize water from a new reservoir but were not in favor of more restrictive water policies, like limiting turf or watering restrictions. Kiro and Alex recommended that PBAC consider funding another iteration of the survey to verify the results and clarify any inconsistencies in the results. Kiro and Alex reported that they expect to have an executive summary of the results completed within a couple months.
- **LEAP Project Update: Korey Woodley** – Woodley reported that there were delays in progress because of difficulties getting ahold of people on the LEAP list. Woodley reported that they created an informational handout to distribute during the interviews (attached below). Committee members provided suggestions for edits. Woodley said that her and Josh developed a new plan and hope to have more updates at the next PBAC meeting.

## 4) Unfinished Business

- **Subcommittee updates:**
  - **Research – Kevin Gardes:** Gardes reported that Giacomo Medici has put in his notice to leave the post-doctorate position as of March 2020. Gardes said that Giacomo will be asked to document the model as much as possible and that they would have a subcommittee meeting to decide on next steps for continuing the project. Gardes reported that the model is nearly complete and ready for scenario exploration. Woodley shared a document of the scenarios that the subcommittee selected to be addressed in the model (attached below). Woodley reported that she will be meeting with Giacomo to discuss next steps.
  - **Communications – Paul Kimmell:** Kimmell reported that they are working with the City of Moscow to release the RFP. Kimmell reported that he and Woodley had a conversation with Neeley Miller to report on PBAC progress and that he would be attending the board meeting to give them further updates.
  - **Budget Committee – Eugene Gussenhoven:** Woodley said that she is working on the budget report and would plan a meeting when it is near completion. Woodley reported that all but one check has been received for the current fiscal year.

## 5) Budget – Korey Woodley:

- **Budget Report:** Woodley presented the budget as of January 16<sup>th</sup>, 2020.

## 6) Other Reports and Announcements as Time Allows –

- Palmer reported that the article for the American Public Works Association magazine is completed and that he would share this with the committee when it is released.
- **Next PBAC Meeting – Thursday, February 20<sup>th</sup>, 2020, 2:00 PM, Moscow.**

**7) Adjourn at 3:47 PM**

**Korey Woodley, PBAC Executive Manager**

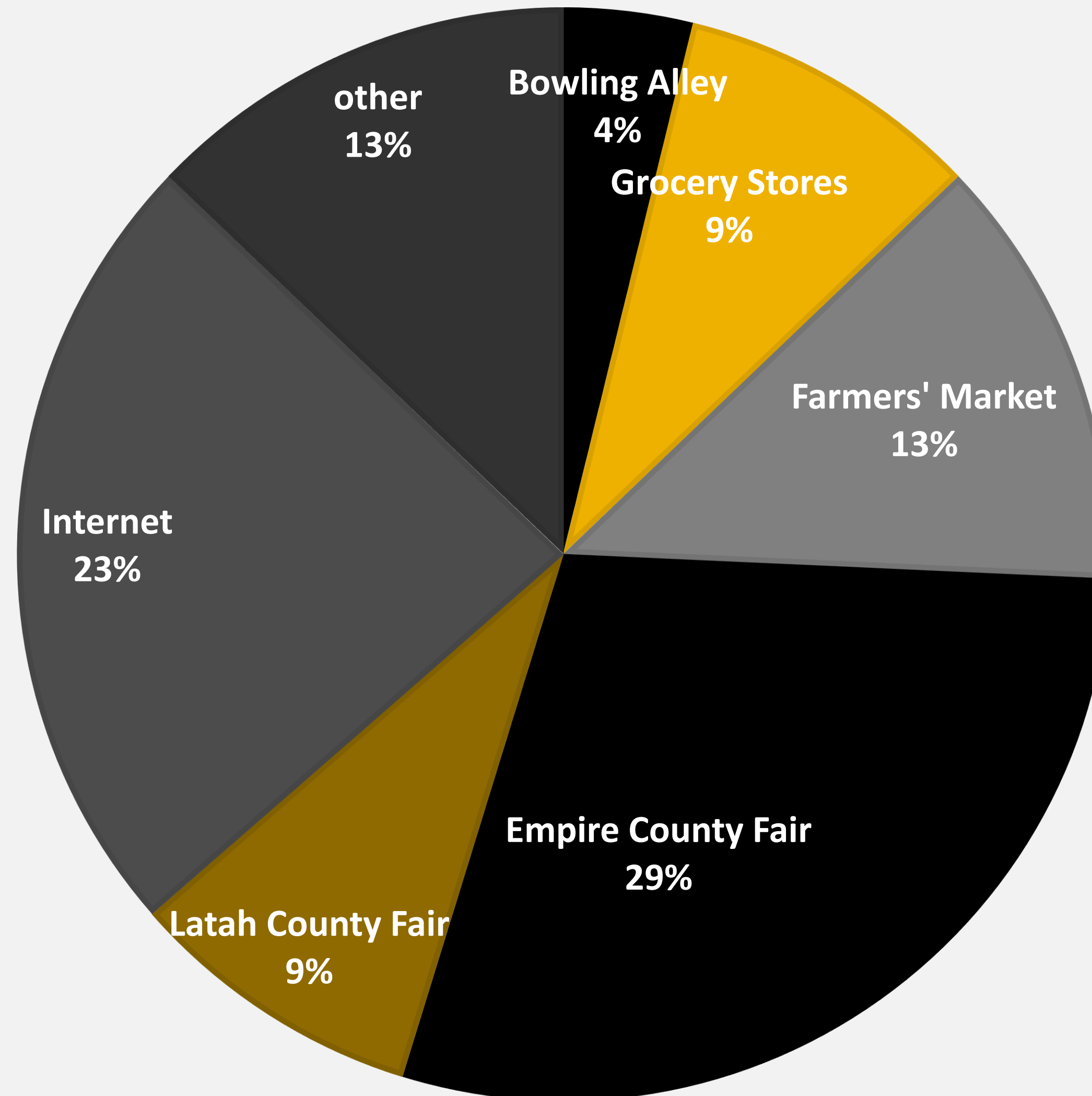


University  
of Idaho

# **PBAC SUPPLY SURVEY RESULTS**

**ALEXANDER MAAS  
KOROLE AWAD**

# SURVEY RESPONDENTS



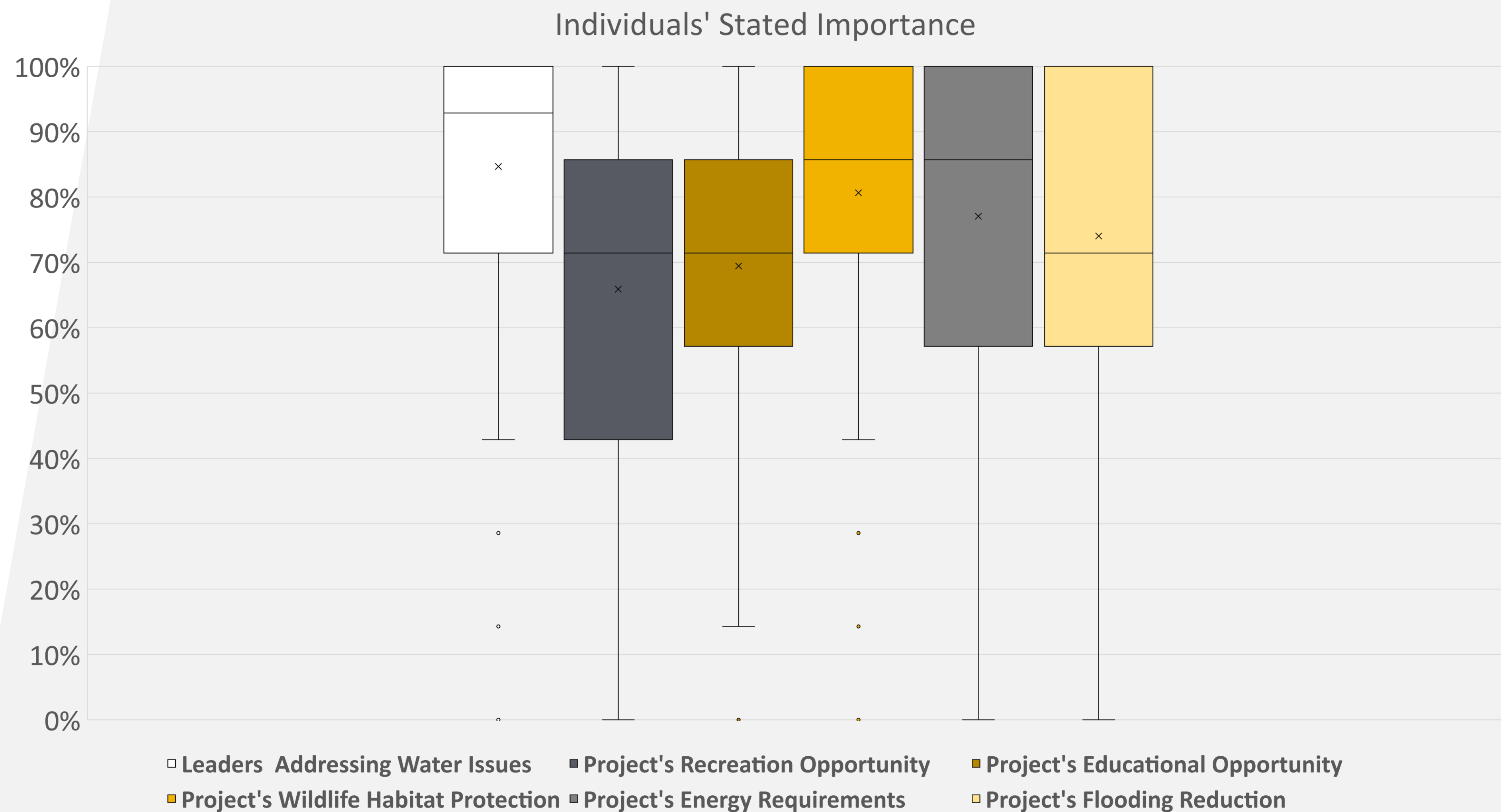
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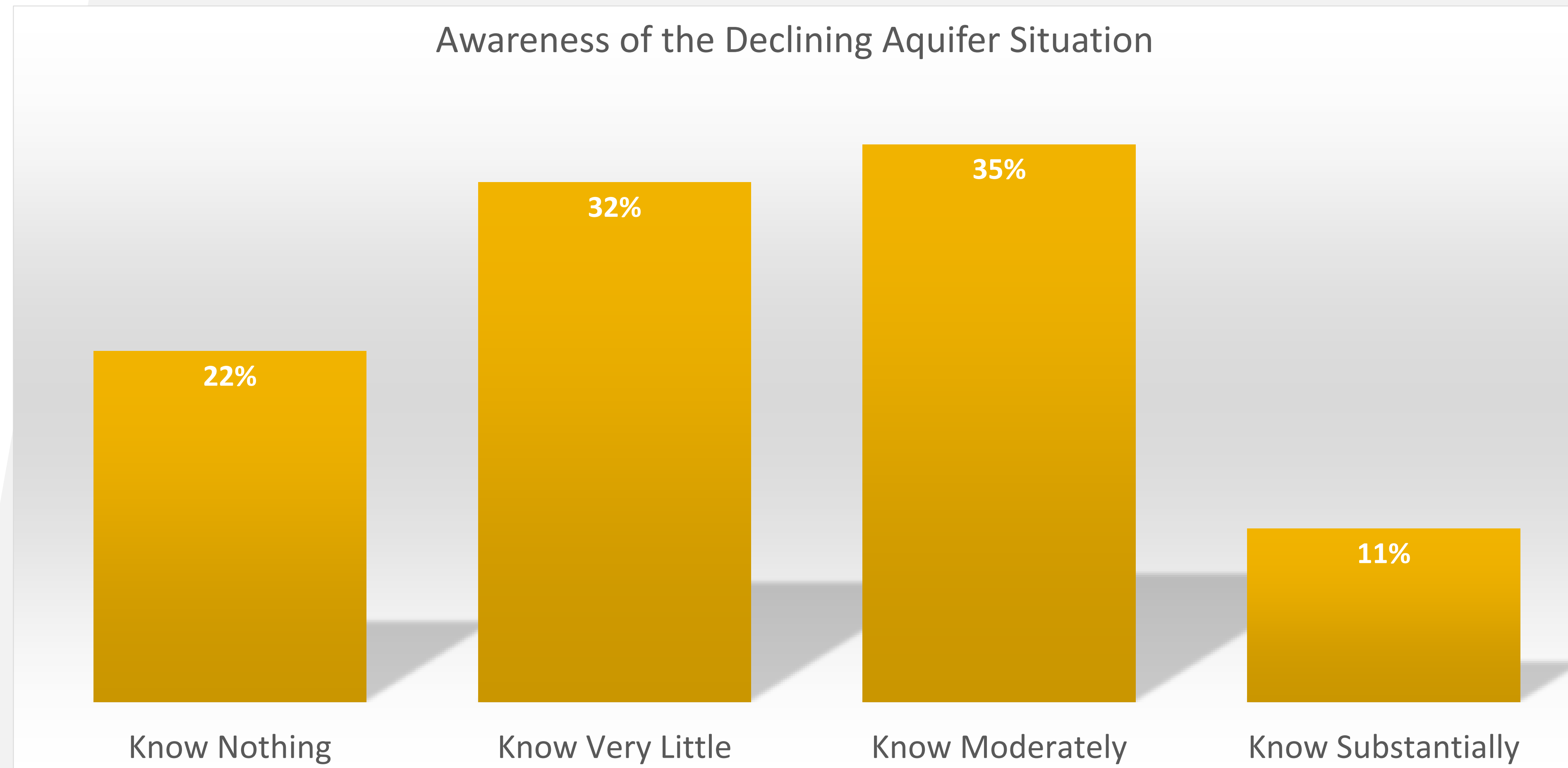
# SURVEY RESPONDENTS

Age	% of Sample	Gender	% of Sample	Growing-up-location	% of Sample	Water Provider	% of Sample
18-24	13%	Male	58%	Northwest	55%	Municipal Water	68%
25-34	16%	Female	42%	Southwest	10%	Personal Well	23%
35-44	16%	Other	7%	Northeast	9%	Uncertain	9%
45-54	19%			Southeast	6%		
55-65	16%			Midwest	13%		
65+	20%			Outside the US	7%		

# SURVEY RESPONSES



# SURVEY RESPONSES







# WILLINGNESS TO PAY FOR SUPPLY

THINK OF THESE AS CHANGE TO THE MONTHLY BILL THAT WOULD HAVE TO OCCUR TO KEEP FOLKS INDIFFERENT TO THE ATTRIBUTE

	Full Sample	Utilities	Well	Own	Rent
Large River	0.54	0.59	7.22	2.74	1.76
Small River	-7.19***	-8.59**	10.66	-5.03	-7.61*
Wastewater	-0.03	-2.42	15.17**	0.57	-0.05
Groundwater	-	-	-	-	-
Appliance Rebate	1.99	1.34	1.05	0.41	4.27
Grass Restriction	-13.08***	-13.33***	-27.48**	-13.73***	-13.01***
Watering restriction	-5.92**	-6.8**	-16.79**	-3.95	-8.46**
Grass Rebate	-	-	-	-	-
Aquifer Injection	13.28***	16.63***	11.83*	15.92***	8.96**
Reservoir	14.39***	13.71***	16.33**	12.77***	15.35***
No Storage	-	-	-	-	-

# WILLINGNESS TO PAY FOR SUPPLY

A WATERING RESTRICTION WOULD REQUIRE A \$6 DECREASED IN THE BILL.

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No Storage	-	-	-	-	-



# WILLINGNESS TO PAY FOR SUPPLY

FOLKS WOULD BAY >\$14 TO HAVE  
A RESERVOIR.

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No Storage	-	-	-	-	-



# WILLINGNESS TO PAY FOR SUPPLY

PARSED SAMPLE INTO CITY  
RELEVANT CHARACTERISTICS TO  
SEE IF PREFERENCES ARE  
DIFFERENT ACROSS “TYPES” OF  
FOLKS.

(WE ALSO HAVE GENDER, AGE,  
ORIGIN, ETC.)

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No Storage	-	-	-	-	-

# WILLINGNESS TO PAY FOR SUPPLY

NOT SURPRISINGLY,

PEOPLE ON PERSONAL WELLS,  
WANT THE NEW UTILITY SUPPLY  
TO BE RECLAIMED WATER...  
PEOPLE ON UTILITY WATER, DO  
NOT.

A TAILORED COMMUNICATION  
STRATEGY MAY BE HELPFUL

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Reservoir	14.39***	13.71***	16.33**	12.77***	15.35***
No Storage	-	-	-	-	-

# WILLINGNESS TO PAY FOR SUPPLY

GENERALLY STRONG SUPPORT  
FOR A RESERVOIR OR AQUIFER  
INJECTION WITH A SLIGHT  
DIFFERENCE ACROSS GROUP.

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Large River	0.54	0.59	7.22	2.74	1.76
Small River	-7.19***	-8.59**	10.66	-5.03	-7.61*
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Reservoir	14.39***	13.71***	16.33**	12.77***	15.35***
No Storage	-	-	-	-	-



# WILLINGNESS TO PAY FOR SUPPLY

GENERALLY STRONG OPPOSITION  
TO OUTDOOR RESTRICTIONS.

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Small River	-7.19***	-8.59**	10.66	-5.03	-7.61*
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## We Want Your Feedback

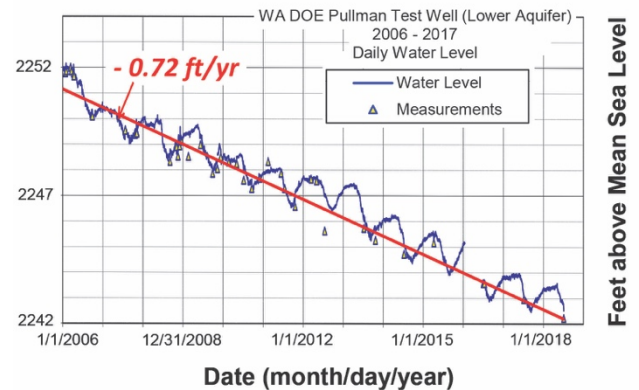
PBAC is reaching out to the community to gain feedback and better identify, inform and engage residents about future processes and options impacting the Palouse Basin Aquifer. There is increased regional awareness and action. For example, there has been a 13% decline in pumping since the creation of the 1992 Palouse Basin Groundwater Management Plan, even though the population has grown by over 35%.

Although the rate of decline has lessened due to conservation progress, **aquifer levels continue to drop**. Augmented supply strategies will be needed to stabilize water levels and ensure a long term, quality water supply for basin residents.

In 2015, PBAC hired a consultant team to evaluate the most promising supply options to meet water supply demand. In March 2017, the consultant team completed the *Palouse Groundwater Basin Water Supply Alternatives Analysis Report*, which identified four possible project options to slow aquifer depletion. The report is available on PBAC's website: <http://palousebasin.org>.

Further refinement progress must be made for the Palouse Basin Aquifer to be selected as a priority area by the Idaho Department of Water Resources within their water project funding cycle. The estimated capital cost of the four alternatives ranges from \$60 million to \$86 million.

The Palouse Groundwater Basin underlies an approximately 500 square mile area of north central Idaho and eastern Washington. 60,000 residents rely on the aquifer.



**Korey Woodley**

*PBAC Executive Manager*

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**Early 1900s:**  
Aquifer decline  
first measured

**1960s:**  
Water level  
concerns result  
in PBAC  
Creation

**1992:**  
Groundwater  
Management  
Plan sets goals  
for limiting  
water pumping

**1990s to  
Present:**  
Conservation  
progress amid  
continuing  
decline

**Present:**  
Alternative  
water supply is  
necessary to  
avoid further  
decline



## Scenarios for WSU Groundwater Model

Palouse Basin Aquifer Committee

Research Subcommittee Meeting: 1/15/2020

- 1) Sustainable yield of the basin as configured/ How much do we need to reduce pumping to stabilize the aquifer?
  - Revitalize the aquifer, what would it take to get the aquifer level to rise 10, 20, or 30 feet?
  - If we reduce the pumping to a sustainable level, how much would the aquifer rise?
- 2) Status quo with no pumping increases/ Would the aquifer stabilize with no pumping increases in 10, 20, or 30 years? More?
- 3) Water levels with no supply alternative(s) using demand estimates in the Alternative Supply project
- 4) Water levels with 1/2, and twice, the population growth assumed in the Alternative Supply project (which assumed a 1% increase)
- 5) Estimate on total volume of water in the basin within the parameters of the model
- 6) Aquifer recharge

Other questions for the Modeling team?

- 1) Can multiple recharge estimations be plugged into the model?
- 2) **\*\*\*Prioritize documentation of the model during the last couple months\*\*\***
- 3) Is there someone/student intern that we could hire to work in the model to explore scenarios?