

Columbia Basin Development League
Stakeholder Survey:
Final Report

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Executive Summary & Key Results

The Columbia Basin Project (the Project) irrigates nearly 700,000 acres of agricultural land in Washington state. The Project, however, remains unfinished while current irrigation infrastructure needs repair and replacement. This survey gathered stakeholder opinion about the most pressing issues for the Columbia Basin region and potential ways to address these issues.

During the month of September 2019, the Columbia Basin Development League (the League) Stakeholder Survey was live. The survey was a web-based survey housed online using the survey software Qualtrics. Individuals were contacted directly via email and with postcard mailers. The survey was also promoted by the League via social media, League newsletters, and the League website, among other avenues.

The purpose of the survey was to access:

- Knowledge of existing issues around water availability and possible solutions to water shortages
- The priorities of different stakeholders of the Columbia Basin
- General awareness of the League's existence, purpose, and role in the community and with the Columbia Basin Project

Four main groups were analyzed to compare differences among groups of stakeholders:

- (1) the total sample, which includes every respondent;
- (2) elected officials, which includes any respondent who identified themselves as "elected official" in the survey;
- (3) landowners/farmers/growers, which includes respondents actively engaged in the agriculture industry and issues of the region; and
- (4) those reporting they have never heard of the League, a group who generally were less aware of the issues tackled in this survey. This group served as a comparison group to the more engaged group of landowners/farmers/growers.

The final sample size for analysis was 255.

This following section serves as an executive summary of major findings.

When it comes to concern over water availability across Grant, Adams, Lincoln, and Franklin counties, depletion of the Odessa Aquifer is the most cited concern.

Depletion of the Odessa Aquifer was cited more frequently than any other water issue as very important (67%) by respondents. This was followed closely by the availability of water for irrigation (58.8%) and the overall economic impact of water depletion (49.4%).

Despite ground water use being selected most frequently (55.6%) as the most significant problem facing the Columbia Basin today, more frequently than environmental issues (14.7%) or economic (13.1%) issues, most people (59%) feel not enough is being done to secure a sustainable water supply/source in the county they work or live.

Landowners, farmers, and growers are generally more knowledgeable about the Project and water availability concerns of the region than the total sample.

When examining landowners, farmers, and growers separately, we see they are generally more knowledgeable about the Project and sources for funding when compared with the rest of the sample group. This group prioritizes completion of the Project at higher rates (67%) than the total sample (63%).

Interestingly, the group least familiar with the Project, those who have never heard of the League and most represent the general public, were more likely to select maintenance and repair of existing infrastructure as the best way to address water concerns.

Respondents feel it is the responsibility of federally elected officials to complete the Columbia Basin Project—though, locally elected officials also bear some responsibility, according to those in the agricultural industry.

A large majority (86%) of respondents feel federally elected officials are responsible for completing the Project. This is followed by three out of four respondents (76%) who feel it is also the responsibility of locally elected officials.

Interestingly, one in three (32%) landowners/farmers/growers strongly agree completion of the Project is up to locally elected officials while just one in ten (8%) elected officials strongly agree completion of the project is up to them.



Goals for the League

Based on the collected data, we envision the League's short, mid, and long-term goals, first, as increasing support for the organization and awareness of the Project. This engagement will lead

to better communication and relationship building with locally elected politicians who can assist the League with policy changes for future League goals. Finally, respondents in this survey consistently cited completion of the Project as an important goal. However, the environmental impacts of expanded irrigation were also cited as a concern. Long-term goals of the League should include meeting stakeholder desires to expand and repair irrigation systems while remaining aware of stakeholders who hope for environmentally sustainable solutions for water use concerns.



Actionable Items from VN Research

When asked which county people are most concerned about, they consistently report they are most concerned about the county they live in. When conducting outreach, educational campaigns, or working to gain support from community members, it will be important to target messaging at the local level since people want to know something is being done specifically for their area even though they recognize water issues plague the entire region.

- ✓ **Action Item #1:** Tailor messaging to smaller geographic regions. Describe what is being done for residents in their own neighborhood, city, or county, and how the League is working to create a prosperous and sustainable Columbia Basin region for all.

When we analyze differences in responses across geographic regions, we continuously see that Tri-Cities are less concerned about water use issues when compared to regions such as Moses Lake, Ephrata, Othello and Odessa and more concerned about issues like the environment.

- ✓ **Action Item #2:** Priorities vary across geographic regions in the Columbia Basin. When conducting educational campaigns and/or outreach, the League will need to consider the audience. An outreach campaign for the Tri-Cities, for example, should focus on the basics of the Project (general education about what the project is and what the benefits are to the region), while outreach in regions such as Moses Lake, should focus on more detailed actions being taken by the League since this region is already engaged with the issues of groundwater use and irrigation.

The survey reveals that people rely primarily on the internet (43%) for their main source of information about community issues. Additionally, people report newspaper (32%), direct mail/newsletters (26%), and community newspapers (25%) as other places they go to for information about their communities.

- ✓ **Action Item #3:** The League should utilize local print publications along with targeted direct mailers to home addresses and businesses to continue outreach and education and garner support for any future “calls to action” promoted by the League.
- ✓ **Action Item #4:** To reach the general public, more broad sweeping outreach will need to include radio and word of mouth (to include tabling events and general League presence at local events).

Outreach directly from the League was the most successful method for recruiting participants for this survey. Most people (72%) say they heard about the survey through a direct email from the League. This speaks to the high level of engagement of current members and those on the League contact list and makes direct correspondence from the League to its members an important platform for any “call to action” campaign in the future.

- ✓ **Action Item #5:** Through continued communication and outreach, the League can invest with those already in their contact database. These individuals are engaged, concerned

residents of the Columbia Basin who are the League's biggest supporters for future initiatives.

Results from this survey show that those unfamiliar with the League overwhelmingly feel updating and fixing existing irrigation infrastructure is the best way to address water concerns. When advocating for funding, the League may need to educate the general public further about the benefits of infrastructure expansion.

Additionally, it may serve the League to ensure seasoned voices, including landowners, farmers, growers, and those actively involved in the agricultural industry, are clearly heard and advocated for in order to fulfill the League's goal of serving this agricultural community through regular engagement with League leaders.

- ✓ **Action Item #6:** Keep in mind when developing material that the general public is, on average, less concerned about water issues when compared to those active in the agricultural community. It will be up to the League to balance the lobbying needs of their agriculturally involved stakeholders alongside other community concerns like the environment that tend to be more important to the general population.
- ✓ **Action Item #7:** Many people, including some elected officials, are very knowledgeable and aware of the water depletion and irrigation issues facing the area. However, there is room to provide more educational materials to the public—a “call to action” campaign that includes community members and elected officials.
- ✓ **Action Item #8:** The more engaged the public is with the topics tackled by the League, the more the League can rely on the public to engage their locally elected officials on topics such as aquifer depletion or completion of the Project. Education campaigns about the Project, for example, may prove to be an effective way to get elected officials to see the League's issues as important to their constituents.
- ✓ **Action Item #9:** The League can provide a regular and reliable outlet of communication between its leadership and those most engaged with the League (landowners and farmers, for example) by hosting events (informal breakfasts, coffee meetings, etc.) to which stakeholder groups are directly invited via a postcard or email to attend. In this way, the League can directly engage with and collect feedback from a range of stakeholders over time.

Locally elected officials were generally aware of the League. However, a large barrier to connecting to these elected officials via telephone was getting through their gatekeepers, usually administrative assistants or secretaries. These individuals were unaware of the League and, thus, unwilling to connect our team to the elected official to administer the survey. To them, the League's issues were “unimportant” to their elected officials, whether this truly was the case. However, one gatekeeper who was familiar with the League did cite being familiar with the League newsletter.

It will be critical in the future for the League to engage with locally elected officials to ensure the interests of League stakeholders are being adequately addressed by local officials. General awareness of and engagement with the League would provide easier access to these individuals and promote collaboration between the League and these local representatives.

- ✓ **Action Item #10:** Systematically reach out to locally elected officials for in-person meetings, invite them to League events, and consistently engage them to keep the concerns of League stakeholders on the forefront of their agendas.

Columbia Basin Development League: Stakeholder Survey 2019

By

VN Research
Bellingham, WA

Introduction

This report explores opinions about and awareness of issues important to the Columbia Basin Development League (“the League”) and to the future of the Columbia Basin Project (the “Project”). The results provide a snapshot of the major priorities, concerns, and hopes of those living in the Columbia Basin, specifically Adams, Franklin, Grant, and Lincoln counties.

The report highlights overall results for (1) all respondents and significant differences across groups including (2) elected officials, (3) landowners in the Columbia Basin area including farmer/growers in the agricultural industry, and (4) those least familiar with the issues tackled by this survey - those reporting they have never heard of the League. These four groups represent varying degrees of engagement with the League and knowledge and awareness of issues addressed in this survey. Comparing results across these four groups ensures varying kinds of stakeholders are represented in the results of this research.

The Columbia Basin Development League supports the Bureau of Reclamation’s Columbia Basin Project and its development while also representing the interests of stakeholders. This report provides results and analysis that will assist the League in meeting their goals.

Survey Methodology

The 2019 Stakeholder Survey was an online survey programmed using Qualtrics, an industry-leading survey software. Respondents were contacted via email by VN Research and invited to participate in the survey using a provided link. Contacts who did not have a valid email address but did have a physical address were sent a postcard mailer. In addition, the League created a page on the League website, promoted the survey on the League’s Facebook page, and included information about the survey in League newsletters and emails. A press release was also completed to attract members of the general public to participate in the survey.

The total sample reached was 255: 133 from email and 122 from other sources such as survey links provided in newsletters and online.

Response Rates

Response rates are the total number of responses divided by the total number of surveys sent out. For example, a total of 1,858 emails were sent to League contacts of which 133 responded. This constitutes a 7% response rate for email outreach. Likewise, there were 1,860 postcards mailed inviting individuals to take the survey. Out of the postcard recipients, 13 individuals say they heard about the survey through a postcard. This constitutes an approximately 1% response rate for postcard mailers.

Email Response Rate

$$133/1,858 = .0716 \times 100 = \mathbf{7\%}$$

$$\text{Email surveys completed/Total emails sent} = \text{Email responses rate} \times 100 = \text{Response rate (\%)}$$

Postcard Response Rate

$$13/1,860 = .0070 \times 100 = \mathbf{0.7\%}$$

$$\text{Postcard Response Rate/Total postcards sent} = \text{Postcard response rate} \times 100 = \text{Response rate (\%)}$$

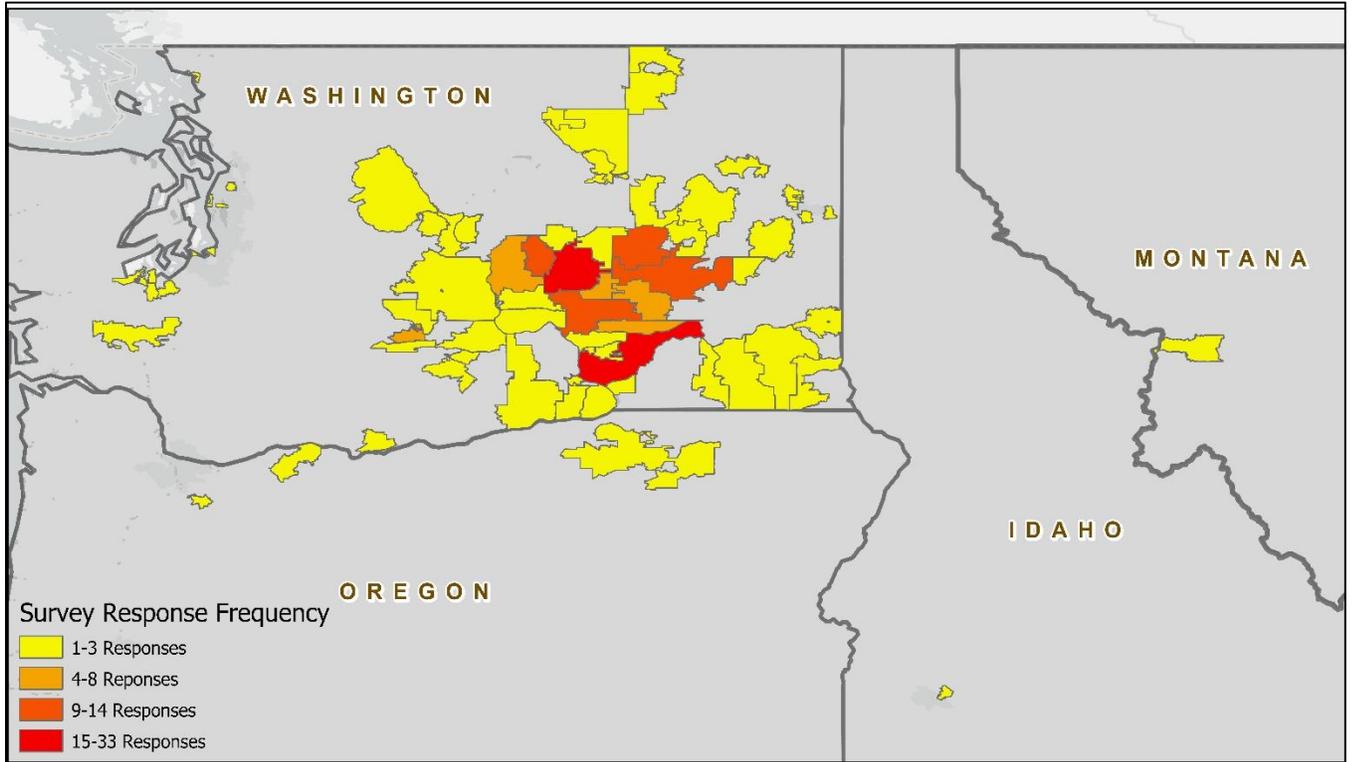
From VN Research's professional perspective, an email response of 7% is impressive considering it is a known fact that, in email outreach, it is common for individuals to delete, dismiss, or never open email solicitations for a survey. This is simply a reality of this method of data collection. Moving beyond the response rate calculation, however, consider that 133 individuals took the time to (1) open and read the email, (2) follow the link to the survey, and (3) proceed to complete the survey.

Similarly, while the response rate for postcards is low (under 1%), the true impact of the postcard is not well-measured by this response rate. While just 13 people report hearing about the survey through a postcard, countless more recipients were exposed to the League's logo and engaged, even if just for a few moments, with the League thanks to the postcard. While we cannot measure the full impact of the postcards in the current project, we can be sure this form of outreach for this survey project was a small step forward to increasing awareness and recognition of the League throughout the community.

Additional Supplements to this report include the following:

1. **Append A: Survey Questionnaire** showing the survey questions, question sequence, and question response options ultimately programmed into the online survey software. Also included are the marginal frequencies in percent that show how many respondents selected each response option.
2. **Appendix B: Open-ended Responses** includes all responses for questions that had open-ended response options where respondents were permitted to enter their own response.
3. **Appendix C: Crosstabulations** that show how different groups responded to a number of key questions.

Map. Survey Responses by Respondent Zip Code.



Red zip code codes: 98837 (Moses Lake), 99301 (Tri-Cities)

Dark Orange zip codes: 98823 (Ephrata), 99159 (Odessa), 99169 (Ritzville), 99344 (Othello)

Respondent Profiles

Table 1 shows a breakdown of basic demographic information for respondents to the survey.

Table 1. Demographic Breakdown of Survey Respondents.

Characteristic	Percent of Sample
GENDER	
Male	74%
Female	20%
Prefer not to answer	6%
TIME IN COLUMBIA BASIN AREA	
<i>Average time in area</i>	<i>34 years</i>
0-1 year	11%
2-10 years	14%
11-20 years	13%
21-30 years	12%
31-40 years	8%
41-50 years	13%
> 50 years	30%
EMPLOYMENT STATUS	
Work Full Time	65%
Work Part Time	9%
Retired	16%
Disabled	0.8%
Student	0.4%
Unemployed	0.8%
Other	1.2%
AGE	
<i>Average</i>	<i>59 years old</i>
<i>Minimum Age</i>	<i>23</i>
<i>Maximum Age</i>	<i>89</i>
20-30 years old	2%
31-40 years old	9%
41-50 years old	16%
51-60 years old	25%
61-70 years old	31%
71-80 years old	13%
81-90 years old	4%

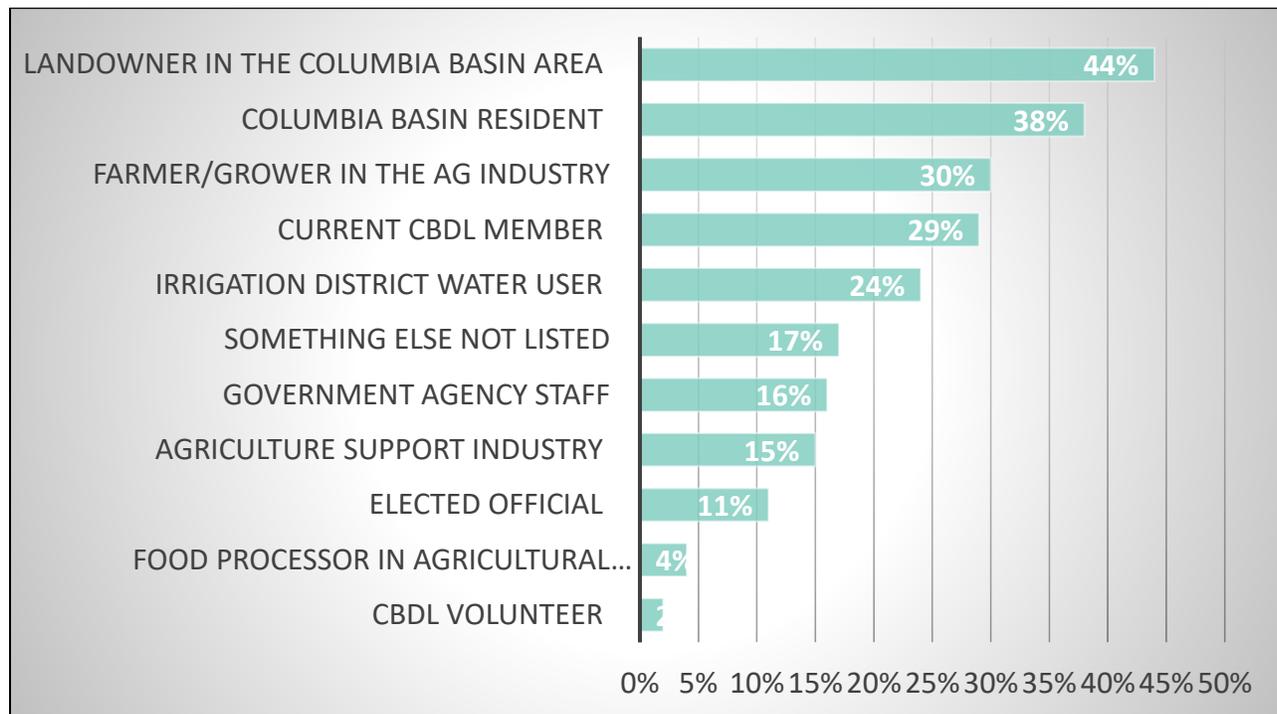
Table 2 describes the most common regions for respondents. Methodology for how regions were determined based on the respondent’s zip code is included in Appendix D.

Table 2. Respondent Regions.

Moses Lake (98837)	13%
Tri-Cities (99301)	9%
Ephrata (98823)	6%
Othello (99344)	5%
Odessa (99159)	4%
Ritzville (99169)	4%

Figure 1 below displays the breakdown of ways survey respondents described themselves. Respondents were permitted to check all descriptions they felt applied to them. For this reason, percentages do not add up to 100. The original survey question read: “Which of the following would you use to describe yourself? Check all that apply. I am a...”.

Figure 1. Self-Description of Survey Respondents.



Respondents who wanted to describe themselves using terms not listed in the survey were provided an option to type in a description of their own. Within this category of “something else not listed” (17% of respondents selected this option), we see that many respondents used this

response option to describe in more detail the nature of their affiliation to agriculture and irrigation. For example:

- Hydrologist who works in the basin
- Groundwater expert working in the Columbia Basin
- Irrigation district board member
- Irrigation district employee
- Irrigation engineer
- Tribal Natural Resource Manager
- Water consultant
- Watershed educator

Others used this open-ended response to describe their past affiliations:

- Former BOR engineer
- Past board member ECBID
- Past elected county commissioner
- Retired ECBID employee
- Retired farmer, past QCBID board member
- Retired Grant Co farmer
- Worked for SCBID

Table 3 displays within which industries respondents felt they belonged. Respondents were permitted to check all industries they felt applied to them. For this reason, percentages do not add up to 100. Most respondents were in Ag/Farming/Ranching (44%) or Government (26%).

Table 3. Industry Breakdown of Survey Respondents.

Industry	Percent of Sample
Ag/Farming/Ranching	44%
Ag Lab	1%
Chemical/Fertilizer	3%
Construction	3%
Consulting	9%
Education	5%
Engineering	7%
Equipment – Farming	3%
Equipment – Irrigation	3%
Finance/Banking/Lending/Accounting	3%
Food Processing	4%
Government	26%
Grain Elevator	0.4%
HVAC	0%
Healthcare	0.8%
Hospitality	0.8%
Insurance	0%
Manufacturing	2%
Media	2%
Legal	3%
Nonprofit	6%
Real Estate	4%
Retail	3%
Transportation	3%
Utility	3%
Other	11%
<i>Original Question: "I work in one or more of the following industries: Check all that apply."</i>	

The “Other” category included space to type an answer not provided for respondents who belong to an industry other than what was listed. Some of those open-ended responses to industry included retired (15 respondents), natural resources (2 respondents), port district (1 respondent), nuclear safety (1 respondent), and irrigation district (1 respondent).

Survey Results



Ground Water Use is Most Important Regional Issue

The first question of the survey gave respondents five options for what the most important issue facing the Columbia Basin area is today. Options included environmental issues (15%), the local economy (13%), ground water use (56%), something not listed (16%), or there are no issues (0%). Most (56%) of the respondents listed ground water use, likely due to the high level of engagement in water concerns of respondents sampled for this project. Nevertheless, these individuals report ground water use beyond any other community issue as the most important.

Table 4 shows that ground water use was most frequently reported as the most important regional issue even by elected officials. On the other hand, those respondents we consider representative of the general public (those who report not having heard of CBDL or the League), are fairly evenly spread across which issue is most important: environmental issues (32%), ground water use (28%), or some other issue (28%). The issue of groundwater, therefore, appears to be a more urgent issue to those engaged with the agricultural industry and to elected officials than to the general public.

Table 4. Most Important Problem Facing Columbia Basin Percentages by Group.

In your opinion, what is the most important problem facing the Columbia Basin area today? Please note: The Columbia Basin includes Adams, Franklin, Grant, and Lincoln County.				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Environmental issues	15%	15%	10%	32%
Local economy	13%	11%	12%	12%
Ground water use	56%	63%	57%	28%
Something else	16%	11%	21%	28%
TOTAL	100%	100%	100%	100%

Likewise, we see differences across the five regions from which we have the most responses: Moses Lake, Tri-Cities, Ephrata, Othello, Odessa, and Ritzville.

Table 5 shows a breakdown of which issues are most important by region. The first column represents the total sample, or all respondents. While groundwater use is cited most frequently as the most important problem facing the Columbia Basin area for all respondents (56%), we see Odessa cites ground water use almost exclusively as the most important problem (90.9%) and Othello respondents select it more than 3 out of 4 times (76.9%), while the Tri-Cities select groundwater use just a quarter (26.1%) of the time. Tri-Cities most frequently cite local economy as the most important issue, more frequently than any other region displayed. Likewise, Tri-Cities sees environmental issues as an important problem more frequently (17.4%) than any other region in the table.

Table 5. Most Important Problem Facing Columbia Basin Percentages by City.

In your opinion, what is the most important problem facing the Columbia Basin area today? Please note: The Columbia Basin includes Adams, Franklin, Grant, and Lincoln County.							
	TOTAL SAMPLE	Moses Lake	Tri-Cities	Ephrata	Othello	Odessa	Ritzville
Environmental issues	15%	9.1%	17.4%	7.1%	0%	0%	0%
Local economy	13%	12.1%	30.4%	21.4%	7.7%	0%	20%
Ground water use	56%	57.6%	26.1%	64.3%	76.9%	90.9%	70%
Something else	16%	21.2%	26.1%	7.1%	15.4%	9.1%	10%
TOTAL	100%	100%	100%	100%	100%	100%	100%

Depletion of Groundwater/Aquifer Most Pressing Water Issue

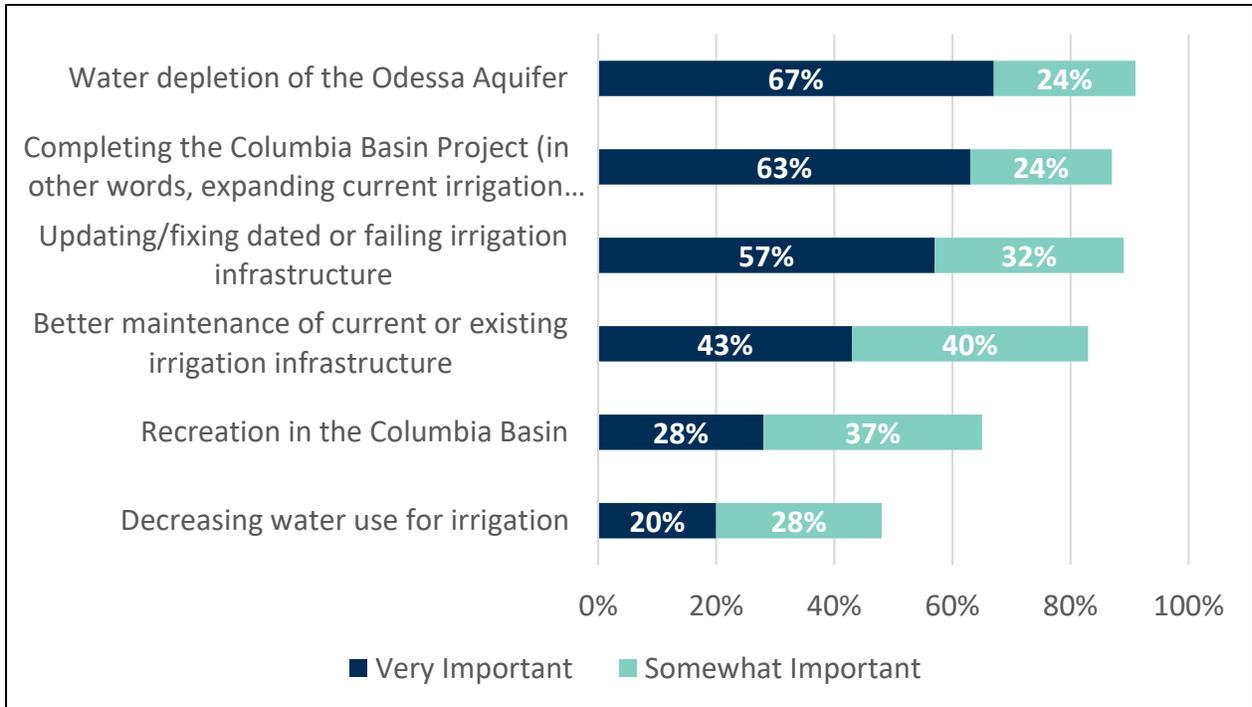
Of the respondents who believe ground water use is the most important problem facing the Columbia Basin, people are most concerned about the depletion of groundwater.

- Two thirds of respondents (65%) say depletion of the groundwater/aquifer is their biggest concern.
- The most common concerns following this are availability of water for irrigation (59%), overall economic impacts of water depletion (49%), and availability of drinking water (42%).
- In contrast, just one in four (26%) respondents report that their biggest concern is overall environmental impacts of water usage.

Depletion of Odessa Aquifer is Biggest Concern

Respondents were asked how important six issues were to them and their families. Water depletion of the Odessa Aquifer was cited most frequently as very important (67%). Completing the Project came in at a close second as the issue cited most frequently as very important (63%) to respondents and their families. Figure 2 displays these results.

Figure 2. Most Important Concerns to Respondent and their Family.

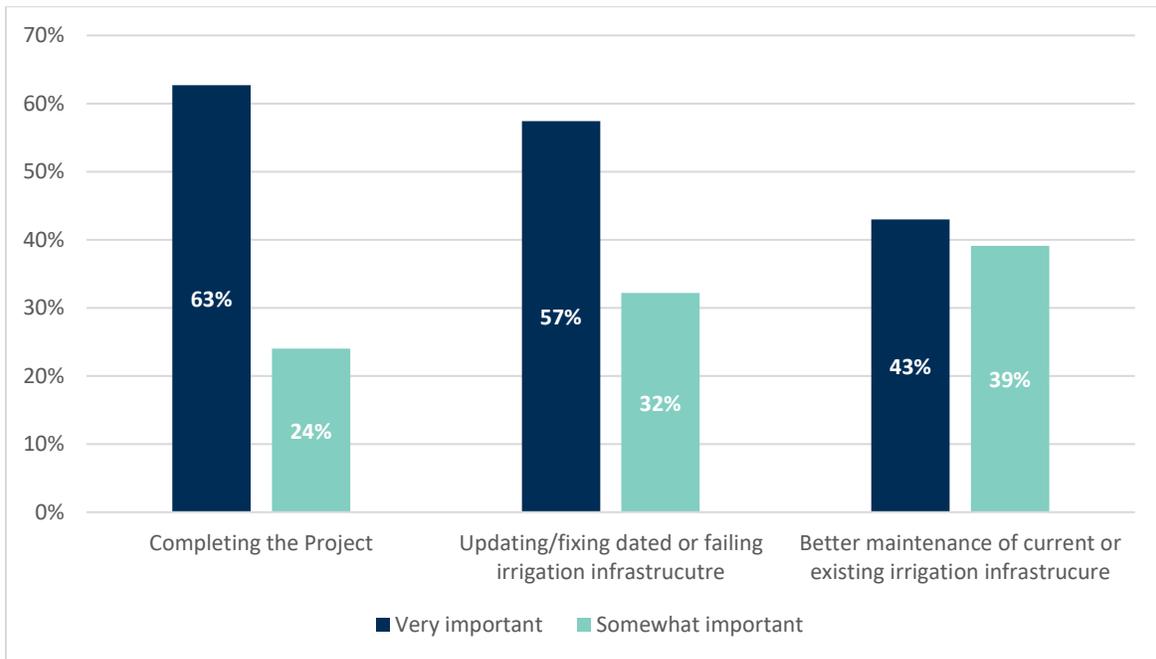


To Solve Water Availability Issue, Expand and Repair Irrigation Infrastructure

Respondents who feel water availability is the biggest issue facing the Columbia Basin region strongly feel that the expansion of the current irrigation infrastructure—over half (54%)—is the best solution for addressing water availability issues. This number is even higher for landowners/farmers/growers with most (62%) agreeing the expansion of current infrastructure is the best solution. Comparatively, just one in four respondents (24%) believe increasing funding to expand other water sources is the solution and fewer than one in ten (7%) believe diversifying the local economy to include other industries beyond agriculture is the solution.

The expansion of irrigation infrastructure through the completion of the Columbia Basin Project, specifically, is very or somewhat important to nearly all respondents (87%). Likewise, we see respondents feel strongly that updating/fixing dated or failing infrastructure is very or somewhat important to almost all respondents (89.6%) as well as better maintenance of existing infrastructure (82.1%).

Figure 3. Importance of Expansion and Repair of Irrigation Systems, Total Sample.

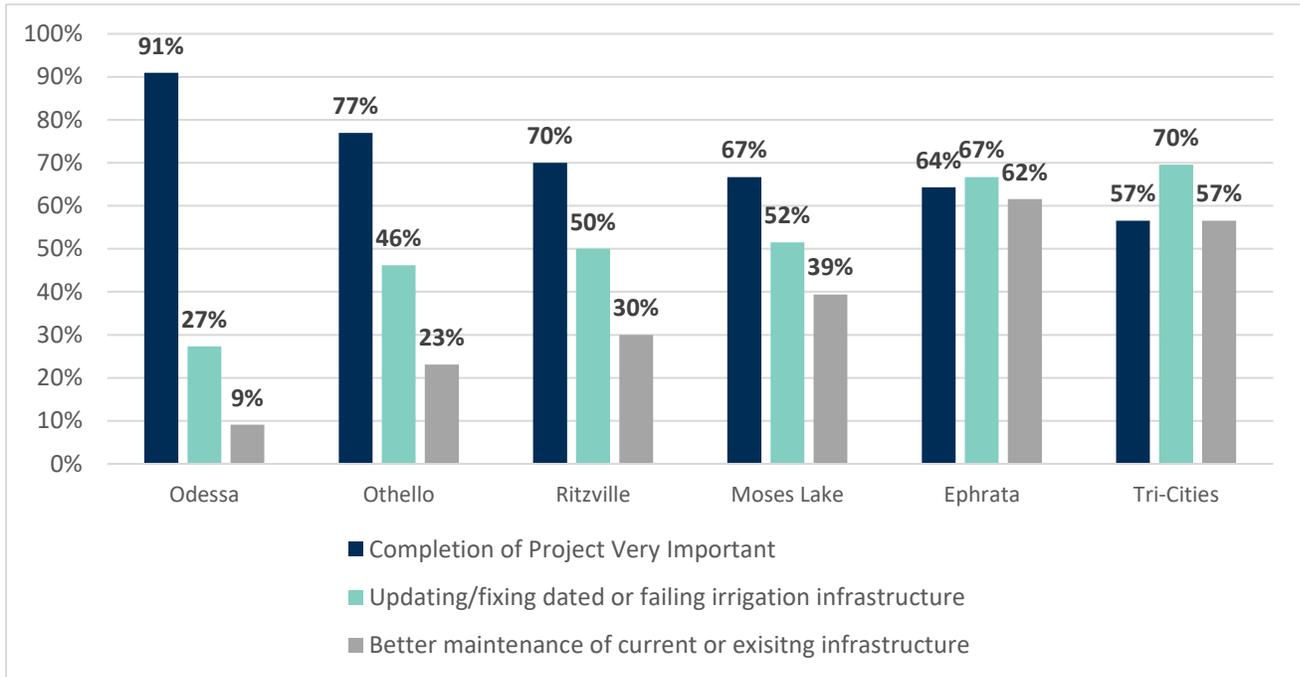


We see in Figure 3 above that the completion of the project is cited most frequently as very or somewhat important to respondents. However, we do see differences in this priority across different groups. For example, Odessa and Othello have slightly higher rates of respondents who feel completing the Project is very important (90.9% and 76.9%, respectively), while Tri-Cities has the lowest rate of respondents (56.5%) who feel completing the Project is very important.

Tri-cities and Ephrata, on the other hand, have the highest rate of respondents citing updating/fixing dated or failing irrigation infrastructure as very important (69.6% and 66.7%, respectively). Odessa cites updating/fixing irrigation infrastructure as very important just over a quarter of the time (27.3%).

Finally, better maintenance of current or existing infrastructure is cited as very important most frequently by Ephrata (61.5%) and Tri-Cities (56.5%), while, again, Odessa cites is as very important the least (9.1%).

Figure 4. Rate of Expansion and Repair of Irrigation Systems Reported Very Important by City.



People are Knowledgeable about the Project and its Funding Source

Respondents are mostly familiar with the Columbia Basin Project. A majority (68%) are either extremely or very familiar with the project: they have extensive knowledge and actively participate in project happenings (extremely familiar) or know a lot about the project (very familiar). They know that the project is a federal project (89%) and most believe the top two sources of funding for the project are federal grants (64%) and irrigator assessments (54%).

This finding does not remain, however, when we examine those who have never heard of the League. A quarter (24%) of these individuals report they are not at all familiar with the project.

League Members are Satisfied

Members are satisfied with the League and plan to support the League through continued membership. About one in three respondents is a member of the League. Of those members, almost all (89%) are very (41%) or somewhat (48%) satisfied with the work the League has done in the past few years, and an overwhelming majority (99%) of members plan to renew membership in 2020.

What do members feel are the responsibilities of the League? The most common response was that the League is responsible for advocating for federal funding (65%), followed closely by advocating for state funding (58%) and seeing that the Project is completed (58%).

Table 6. League Responsibilities According to Members

What, in your opinion, are the responsibilities of the League? (Check all that apply)	
Advocate for federal funding/support	65%
Advocate for state funding/support	58%
See that the Columbia Basin Project is completed	58%
Address the depletion of the Odessa Aquifer	55%
Advocate for local funding/support	46%
Maintain existing irrigation infrastructure	39%
Address other community concerns	11%

The one in ten (11%) respondents who believe the League should address other community concerns frequently cite advocacy (6 respondents) and public outreach (4 respondents) as responsibilities of the League. Respondents hope the League will advocate for things such as “allocation and management of water whether CBP, state, or private,” “completion of the project,” or “represent landowners in matters dealing with agencies involved in the project’s future.”

In terms of public outreach, respondents hope the League will “educate others about the project, its purpose, and its opportunities.” Another hopes the League will “garner public support by ensuring all of the benefits of the CBIP are adequately supported, including environmental and recreational.”

Those Unfamiliar with League are the Least Knowledgeable or Concerned

Those reporting they are not familiar with the League were analyzed as a group who may live and work in the Columbia Basin region but are not actively engaged in the agricultural industry. This group answered “Don’t know” much more frequently than others on questions such as, knowledge about the Project (24% say they have never heard about the Project compared to 2.8% of the total sample) or whose responsibility it is to address the region’s water concerns (For example, 10% of the total sample say they are not sure if it is the League’s responsibility to secure water sources for the future while 35% of those unfamiliar with the League say they don’t know if the League is responsible for securing water sources for the future.)

This group tends to be less concerned with issues tackled by this survey. For example, they are concerned about issues such as the environment more frequently than other groups. Table 6, below, shows this group is evenly spread across each local concern.

Table 7. Most Important Problem for those Never Hearing of CBDL.

In your opinion, what is the most important problem facing the Columbia Basin area today? Please note: The Columbia Basin includes Adams, Franklin, Grant, and Lincoln County.		
	TOTAL SAMPLE	NEVER HEARD OF CBDL
Environmental issues	15%	32%
Local economy	13%	12%
Ground water use	56%	28%
Something else	16%	28%
TOTAL	100%	100%

Exploring Open-Ended Responses

Open-ended responses represent a small proportion of respondents in this survey. This is because it is much more common for respondents of this survey to have selected a close-ended, or pre-offered response. However, qualitative responses can present nuanced understandings to some of the research questions asked in this survey. After analysis of the open-ended responses, we find that respondents tended to use the open-ended response option to describe, in further detail, a response option already offered. For example, a respondent may have selected “ground water use” as the most important problem facing the region but selected the “something else” option in order to write a more detailed response, for example, “Depleting ground water, both irrigation and domestic use.” We take some of the key substantive questions in this survey and evaluate the verbatim responses in this section.

What is the most important problem facing the CB region today? – “Something else”

Respondents were given an open-ended response option when asked “what is the most important problem facing the Columbia Basin region today? Respondents who selected “something else” (16.3%) cited a variety of topics that went beyond the options provided in the question. Some of these responses included social issues (housing, homelessness, and immigration reform). Other responses included political issues pertaining to irrigation and the Project such as “national policy decision not to complete the project”, “political division of the state”, “government slowing down the expansion progress”, and “infrastructure of the project”.

When it comes to water availability, what are your biggest concerns? – “Other”

For those describing their biggest concerns over water availability in the “other” category (8.6%), we find there are diverging opinions between those who name “environmental impacts” such as “duck hunting” or “cool water in river for salmonids” as their biggest concern compared with those who are concerned about “environmentalists restricting use of water” or “federal regulations”.

What, in your opinion, are the best steps to take to address water availability?

Of the respondents who selected other for the question asking what they believe to be the best steps to address water availability (15.7%), we find that completion of the Project and expanding current irrigation systems are some of the most common responses. One respondent suggests to “expand irrigation infrastructure where feasible, expand to other water sources, change WA water law, and get the USBR out of the process”. Others suggest “reducing water use”, “price water”, or “improve efficiency of water use”. This wide variety of responses speaks to the fact that “it’s a hard question”, as stated by one respondent. To them, they think “the first question would be...will irrigation infrastructure be expanded?” Once that is determined, they believe this question will be more easily answered.

Appendices

Appendix A: Survey Questionnaire

Columbia Basin Development League Stakeholder Survey

FINAL VERSION

Thank you for participating. This survey is being developed and administered by VN Research, a Washington-based, third-party survey research firm, on behalf of the Columbia Basin Development League (the League).

We would like to know your opinion about some of the current topics being discussed about the Columbia Basin region. Your participation in this survey is completely voluntary and confidential. The survey takes approximately 5 minutes to complete.

If you have any questions/concerns, please contact Jenny Nguyen, Ph.D. at info@vn-research.com.

Q1. I live in _____ County.

- Adams [14.2%]
- Franklin [15.4%]
- Grant [33.5%]
- Lincoln [5.9%]
- Other _____ [31.1%]

Q2. In your opinion, what is the most important problem facing the Columbia Basin area today?
Please note: The Columbia Basin includes Adams, Franklin, Grant, and Lincoln County.

- Environmental issues [14.7%]
- Local economy [13.1%]
- Ground water use [55.6%]
- Something else _____ [16.3%]
- None [0.4%]

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Q3. How familiar are you with the “Columbia Basin Project”?

Extremely	Very	Somewhat	A little	Not at all
[26%]	[41.6%]	[22.8%]	[6.8%]	[2.8%]
I have extensive knowledge of the Columbia Basin Project and actively participate in Project happenings	I know a lot about the Columbia Basin Project and try to stay informed	I know about the Columbia Basin Project but do not keep up with it regularly	I’ve heard about the Columbia Basin Project, but I don’t know much about it	I’ve never heard of the Columbia Basin Project

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[If Q3 is Extremely, Very or Somewhat]

Q3a. To the best of your knowledge, the Columbia Basin Project is a _____ project.

- Local [5.4%]**
- State [5.8%]**
- Federal [88.8%]**

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Q4. Please tell us if you strongly agree, agree, disagree, or strongly disagree with the following statements.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Don’t Know/Not Sure
I am concerned about water availability in one or more of the following counties: Grant, Adams, Lincoln, or Franklin.	[62.9%]	[28.2%]	[5.3%]	[0.8%]	[2.9%]
Enough is being done to secure a sustainable water supply/source <i>in the county where I live or work.</i>	[3.3%]	[29%]	[37.8%]	[20.7%]	[9.1%]

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[If Strongly Agree or Agree to “I am concerned about water availability in on or more of the following counties:”]

You stated you are concerned about water availability in Grant, Adams, Lincoln, or Franklin.

Q4a. Which county are you *most* concerned about?

- Adams [15.5%]
- Franklin [6.4%]
- Grant [19.6%]
- Lincoln [10%]
- All equally [43.8%]
- Don't know/Not sure [4.6%]

Q4b. When it comes to water availability, what are your biggest concerns? *Check all that apply*

- Depletion of the ground water/aquifer [64.7%]
- Availability of water for irrigation [58.8%]
- Availability of drinking water [41.6%]
- Availability of water for food processing [29%]
- Overall environmental impacts of water usage [25.5%]
- Overall economic impacts of water depletion [49.4%]
- Other (Please specify): _____ [8.6%]

Q4c. What, in your opinion, are the best steps to take to address water availability?

- Expand current irrigation infrastructure [53.9%]
- Diversify our local economy to include other industries beyond agriculture [6.5%]
- Increase funding to expand to other water sources [24%]
- Other (Please specify): _____ [15.7%]

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Q5. For the following statements, please tell us if they are very, somewhat, not too, or not at all important to you and your family.

	Very important	Somewhat important	Not too important	Not at all important	Don't Know/ Not sure
Water depletion of the Odessa Aquifer	[66.8%]	[24.3%]	[4.3%]	[1.7%]	[3%]
Completing the Columbia Basin Project (in other words, expanding current irrigation infrastructure to unserved lands)	[62.7%]	[24%]	[6%]	[5.6%]	[1.7%]
Decreasing water use for irrigation	[20.3%]	[28.2%]	[18.9%]	[24.7%]	[7.9%]

Better maintenance of current or existing irrigation infrastructure	[43%]	[39.1%]	[13.5%]	[2.2%]	[2.2%]
Updating/fixing dated or failing irrigation infrastructure	[57.4%]	[32.2%]	[5.7%]	[2.6%]	[2.2%]
Recreation in the Columbia Basin	[27.8%]	[37.4%]	[24.8%]	[9.1%]	[0.9%]

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Q6. Please tell us if you strongly agree, agree, disagree or strongly disagree with the following statements.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know/ Not sure
It is the responsibility of locally elected officials to secure water sources for our region's future.	[32%]	[44.3%]	[14.9%]	[5.3%]	[3.5%]
It is the responsibility of state elected officials to complete the Columbia Basin Project.	[31.3%]	[37.4%]	[18.5%]	[8.4%]	[4.4%]
It is the responsibility of federally elected officials to complete the Columbia Basin Project.	[60.9%]	[25.2%]	[5.2%]	[5.7%]	[3%]
It is the responsibility of the Columbia Basin Development League to secure reliable water sources for our region's future.	[26.4%]	[38.8%]	[17.6%]	[7%]	[10.1%]

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Q7. To the best of your knowledge, which of the following do you believe are the top two sources of funding for the irrigation infrastructure used by the Columbia Basin region? *Select two options*

- Local taxes [6.7%]
- Food processing fees [2.7%]
- Irrigator Assessments [54.1%]
- Federal Grants [64.3%]

- State Grants [34.1%]
- Private donors [3.9%]
- Other types of funding (Please specify): _____ [5.9%]
- Don't know/Can't say [7.1%]

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Q8. Which of the following would you use to describe yourself? *Check all that apply*

I am a...

- Landowner in the Columbia Basin area [43.5%]
- Farmer or grower in the agricultural industry [30.2%]
- Food processor in the agricultural industry [3.5%]
- Agriculture support industry [14.9%]
- Irrigation district water user [23.5%]
- Current Columbia Basin Development League member [28.6%]
- Columbia Basin Development League volunteer [2.4%]
- Elected official [10.6%]
- Government agency staff [15.7%]
- Columbia Basin resident [37.6%]
- Something else not listed _____ [16.9%]

Q9. I work in one or more of the following industries: *Check all that apply*

- Ag/Farming/Ranching [43.5%]
- Ag Lab [1.2%]
- Chemical/Fertilizer [3.1%]
- Construction [2.7%]
- Consulting [9%]
- Education [5.1%]
- Engineering [6.7%]
- Equipment – Farming [3.1%]
- Equipment – Irrigation [3.1%]
- Finance/Banking/Lending/Accounting [3.1%]
- Food Processing [4.3%]
- Government [25.9%]
- Grain Elevator [0.4%]
- HVAC [0%]
- Healthcare [0.8%]
- Hospitality [0.8%]
- Insurance [0%]
- Manufacturing [2%]

- Media [2%]
- Legal [3.1%]
- Nonprofit [5.9%]
- Real Estate [4.3%]
- Retail [2.7%]
- Transportation [2.7%]
- Utility [3.1%]
- Other, please specify: _____ [11%]

Q10. Select the top 2 MAIN SOURCES you turn to for information about community issues?

- Television [6.3%]
- Newspaper [31.8%]
- Radio [10.6%]
- Word of mouth [15.7%]
- Internet [43.1%]
- Direct mail, newsletters [25.9%]
- Social Media [12.2%]
- Community newspapers [24.7%]
- Something else: _____ [6.3%]

Q11. How did you first hear about this survey?

- Email from Columbia Basin Development League [71.8%]
- Postcard in the mail [5.7%]
- Columbia Basin Development League newsletter [6.6%]
- Link on Columbia Basin Development League website [1.8%]
- A friend [3.1%]
- A family member [0.9%]
- Social media [4.8%]
- Newspaper [0.4%]
- Other: _____ [4.8%]

Q12. Before taking this survey, had you heard of the “Columbia Basin Development League” or “the League”?

- Yes [89%]
- No [9.7%]
- I’m not sure [1.3%]

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[IF CBDL Member or volunteer identified in Q8 or “Yes” for Q12]

Q13. How satisfied are you with the work the Columbia Basin Development League has done in the past few years?

- Very satisfied [40.7%]
- Somewhat satisfied [48.2%]
- Not very satisfied [9.5%]
- Not at all satisfied [1.5%]

Q14. What, in your opinion, are the responsibilities of the Columbia Basin Development League? *Check all that apply*

- See that the Columbia Basin Project is completed [57.6%]
- Address the depletion of the Odessa Aquifer [54.5%]
- Maintain existing irrigation infrastructure [38.8%]
- Advocate for local funding/support [46.3%]
- Advocate for state funding/support [57.6%]
- Advocate for federal funding/support [64.7%]
- Address other community concerns (Please specify): _____ [11.4%]

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[IF CBDL Member identified in Q8]

Q15. How likely are you to renew your Columbia Basin Development League membership in 2020?

- Very likely [90.4%]
- Somewhat likely [8.2%]
- Not at all likely [1.4%]

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Demographics

reside. About how many years have you lived in the Columbia Basin area? [**OPEN ENDED w number qualifier**] ____ years

Average (Standard Deviation) = 34.2 years (24)

Minimum = Less than 1 year

Maximum = 89 years

zip. What is the zip code of your primary residence? _____ [**OPEN ENDED w number qualifier**]

employ. Which of the following best describes your current employment status?

Check all that apply

- Work full time [65.1%]
- Work part time [8.6%]
- Retired [16.1%]
- Disabled [0.8%]
- Student [0.4%]
- Unemployed [0.8%]
- Other (Please specify): _____ [1.2%]
 - Farm
 - Lobby in Olympia for rural counties

job. What year were you born? _____ [**OPEN ENDED w number qualifier**]

Average Age (Standard Deviation) = 58.7 years (13)

Minimum Age = 23 years

Maximum Age = 89 years

gender. What is your gender?

- Male [73.8%]
- Female [20.4%]
- Prefer not to answer [5.9%]

report. Would you like to receive a copy of the report resulting from this survey?

- Yes [68.9%]
- No [31.1%]

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[IF YES] What is the best email address to send you the report? *Your information will only be used to send the report and not for any other purpose.*

Email Address: _____

-----Next page-----

incentive. Would you like to be entered into a drawing for a \$100 gas gift card?

- Yes [48%]
- No [52%]

-----Next page-----

[IF YES] Please provide either an email or telephone number where we can contact you if you are the winner. *Your information will only be used to contact you that you have won and not for any other purpose.*

Email: _____

Phone number: _____

Please click the arrow below to submit your responses.

-----Next page-----

Thank you for your time. We appreciate your participation!

[END SURVEY - Redirect survey to CBDL homepage.]

Appendix B: Open-ended Responses

Q1. I live in _____ County.

- Adams [14.2%]
- Franklin [15.4%]
- Grant [33.5%]
- Lincoln [5.9%]
- Other _____ [31.1%]

Asotin	2
Benton	7
Benton-Franklin	1
Chelan	5
Chelan Co.	1
Clackamas	1
Columbia	1
Douglas	3
Ferry	2
Garfield	1
Hood River	1
Idaho	1
King	4
Kittitas	1
Klickitat	1
Lewis	1
Okanogan	1
Oregon	1
Pierce county	1
Ravalli, MT	1
Skamania	1
Snohomish	1
Spokane	7
Stevens	1
Thurston	5
Umatilla	1
Walla Walla	3
Whatcom	2
Whitman	3
Work in Grant & Adams Counties	1
Yakima	10

Q2. In your opinion, what is the most important problem facing the Columbia Basin area today?
Please note: The Columbia Basin includes Adams, Franklin, Grant, and Lincoln County.

- Environmental issues [14.7%]
- Local economy [13.1%]
- Ground water use [55.6%]
- Something else _____ [16.3%]**
- None [0.4%]

Access to additional water supplies
apathy on part of folks
BOR Management
City planning and land use
Clean lake
Climate Change
Cost of power
Crime
Depleting ground water. Both for irrigation and domestic use!
drug use and illegal immigration
Dysfunctional Irrigation District and CBDL. Both not working to fully develop the Columbia Basin Irrigation Project.
expanding regulations
Government overreach
Government slowing down the expansion progress
Homelessness
Housing & Infrastructure
illegal aliens' invasion
Immigration reform
Infrastructure - money to make proper adjustments to environmental and ground water use
infrastructure of the project is the biggest problem the district faces
Issues at Ecbid
It depends on the area. In some areas it is Environmental issues such as nitrates in groundwater or wind erosion. In other areas it is ground water use.
labor
Labor Costs
Lack of support from western Washington legislators, labor costs
liberal democrats
Litigation from activist groups
National policy decision not to complete the project - unfulfilled promise; environmentalists requesting more claims on existing water than is available
OGWRP is moving too slow.
Political Division of the state of Washington
Power & water

Power usage
Regulation
The ability to expand barge facilities on the Columbia River
The Federal Government
The pumping capacity of Grand Coulee dam
Trade wars
WA Clean Energy Transformation Act
Water available to lands bordering the project.
water quality and water availability
westside lawmakers & Environmentalist!

Q4b. When it comes to water availability, what are your biggest concerns? *Check all that apply*

- Depletion of the ground water/aquifer [64.7%]
- Availability of water for irrigation [58.8%]
- Availability of drinking water [41.6%]
- Availability of water for food processing [29%]
- Overall environmental impacts of water usage [25.5%]
- Overall economic impacts of water depletion [49.4%]
- Other (Please specify): _____ [8.6%]

adopting sustainable practices
All the above.
Availability of surface water for artificial recharge to make Groundwater sustainable. Regulatory resistance to artificial recharge permitting.
Certain "colonies" overusing water.
Cool water in river for salmonids
Duck hunting
enviro impacts ON availability of water
Enviro impacts ON water availability
Environmentalists or others restricting use of water, from whatever source.
EPA interference
Ethics issues at the East Columbia Basin Irrigation District
Fair Distribution
Federal Regulations
Groundwater decline and environmental impacts of water usage
Inflexible Regulations
Job Sustainability
Lose opportunity to get funding for finishing the entire project
municipal or industrial water for residential lawns (yards)
Private investment

repayment cost of proposed development in the Odessa aquifer area
Water being used to supply the basin is coming from outside the basin depleting water rights in Okanogan County
wildlife

Q4c. What, in your opinion, are the best steps to take to address water availability?

- Expand current irrigation infrastructure [53.9%]
- Diversify our local economy to include other industries beyond agriculture [6.5%]
- Increase funding to expand to other water sources [24%]
- Other (Please specify): _____ [15.7%]

Complete OGWRP
Complete the CB Project
Complete the entire the Columbia Basin Project Act of 1943 as enacted by Congress, this is the only solution that satisfies the will of the People.
Conservation
Conservation and diversification of local economy
conservation practices around domestic water, municipal wells, understanding the acquirer s
Continue to fund irrigation delivery systems, improve return flow water quality and mitigate environmental impacts.
decrease over regulation, specifically enviro and cultural resource related
Develop creative water storage strategies to add resilience to shortages.
Divert high spring flows to aquifer
Don't allow wells to go deeper, (1000 to 2000 feet) & moving water right were there maybe water or my not
Encourage and fund conjunctive use of surface and ground water
Expand irrigation infrastructure where feasible, expand to other water sources, change WA water law, and get the USBR out of the process.
Expanding irrigation isn't a water availability issue, it's a cost issue. For water availability alone, decrease regulations, specifically environmental and cultural resource related regs.
Get more efficient with existing water usage
Implement conservation projects; reduce water consumption
improve efficiency of water use and provide for water to be available to the uses that provide the highest benefits
Its a hard question. I think the first question would be - in reality will irrigation infrastructure be expanded?
Long-term plan and action that stabilizes the future availability of water for all users
modernize current infrastructure
Optimize use of current water supplies
Plan and start construction of a High canal. Extend the East Low Canal. Federal Funding.
Price water
Pumps are not being repaired on schedule o
Reduce water use
Regulate new residential developments

Responsible Distribution
revoke & remove all deep wells being used for irrigation; replace with Lk Roosevelt water from new canals to Adams County
Steps to manage efficiency (close canals, filter excess through man-made wetlands before returning to streams)
Unsure therefore can't give an opinion.
Use Columbia River water to secure economic viability for all citizens of the basin and food for the world.
Water reuse projects and ASR projects
We need to expand our research into all alternatives that will serve to provide our users with a stable source of water for our next generation of farmers and water users

Q7. To the best of your knowledge, which of the following do you believe are the top two sources of funding for the irrigation infrastructure used by the Columbia Basin region? *Select two options*

- Local taxes [6.7%]
- Food processing fees [2.7%]
- Irrigator Assessments [54.1%]
- Federal Grants [64.3%]
- State Grants [34.1%]
- Private donors [3.9%]
- Other types of funding (Please specify): _____ [5.9%]
- Don't know/Can't say [7.1%]

BPA Ratepayers, Federal Taxpayers
Dont do it
Federal - but must be repaid
Federal and state approriations
Federal taxpayers funding uneconomical water projects such as the Columbia Basin Project.
Fund it per the law just as the original half was developed, loans from Congress and repaid via irrigation assessments.
Money appropriated by Congress
paid by the new water users
power sales
Private user groups
Public/Private Partnerships
Reclamation funding
tax-exempt revenue bonds

Q8. Which of the following would you use to describe yourself? *Check all that apply*

I am a...

- Landowner in the Columbia Basin area [43.5%]
- Farmer or grower in the agricultural industry [30.2%]
- Food processor in the agricultural industry [3.5%]
- Agriculture support industry [14.9%]
- Irrigation district water user [23.5%]
- Current Columbia Basin Development League member [28.6%]
- Columbia Basin Development League volunteer [2.4%]
- Elected official [10.6%]
- Government agency staff [15.7%]
- Columbia Basin resident [37.6%]
- Something else not listed _____ [16.9%]

A consulting hydrogeologist who works in the basin
Citizen
county elected
Dentist
Don't live in those counties
economist
electric utility employee
Former BOR Engineer
Groundwater expert working in the Columbia Basin
Hunter & fisher
I am a dry land farmer appalled at the mismanagement of federal irrigation projects and the constant demand of irrigators for more federal funding for economically wasteful and environmentally damaging water projects.
Interested citizen and hydrogeologist
interested in e washington
Interested party with history of working in the area of conservation.
Irrigation district board member
Irrigation district employee.
Irrigation Engineer
Other Ag Related Board Member
Passed board member ECBID
Past elected county commissioner
Real Estate Appraiser
Real estate broker
Retired ECBID employee
Retired farmer, past qcbid board member
Retired Grant Co farmer

Steward of Columbia basin
Sub Contractor
Tribal Natural Resource Manager
Water consultant
watershed educator
worked for SCBID

Q9. I work in one or more of the following industries: *Check all that apply*

- Ag/Farming/Ranching [43.5%]
- Ag Lab [1.2%]
- Chemical/Fertilizer [3.1%]
- Construction [2.7%]
- Consulting [9%]
- Education [5.1%]
- Engineering [6.7%]
- Equipment – Farming [3.1%]
- Equipment – Irrigation [3.1%]
- Finance/Banking/Lending/Accounting [3.1%]
- Food Processing [4.3%]
- Government [25.9%]
- Grain Elevator [0.4%]
- HVAC [0%]
- Healthcare [0.8%]
- Hospitality [0.8%]
- Insurance [0%]
- Manufacturing [2%]
- Media [2%]
- Legal [3.1%]
- Nonprofit [5.9%]
- Real Estate [4.3%]
- Retail [2.7%]
- Transportation [2.7%]
- Utility [3.1%]
- Other, please specify: _____ [11%]

1/2 way retired
Ag Appraiser
Ag Industry Volunteer
Auto technician
Government

Irrigation district
Natural resource management
Natural Resources
nuclear safety
Port District
Recently retired
Retired
retired capitaist
Retired educator
retired engineer
Retired from a variety of trades
Retired land owner
retired SCBID land owner
Retired (x 6)
service
Water supply development

Q10. Select the top 2 MAIN SOURCES you turn to for information about community issues?

- Television [6.3%]
- Newspaper [31.8%]
- Radio [10.6%]
- Word of mouth [15.7%]
- Internet [43.1%]
- Direct mail, newsletters [25.9%]
- Social Media [12.2%]
- Community newspapers [24.7%]
- Something else: _____ [6.3%]

Attend CRPAG meetings
Basin websites connected to irrigation
Capital Press
Department of Ecology communications/reports
Development League website
Direct contactk
Direct involvement
employment communications
Government documents
Government Officials
Historical Records

Internal Happenings
Local elected officials
officials
retiree
Washington State Association of Counties

Q11. How did you first hear about this survey?

- Email from Columbia Basin Development League [71.8%]
- Postcard in the mail [5.7%]
- Columbia Basin Development League newsletter [6.6%]
- Link on Columbia Basin Development League website [1.8%]
- A friend [3.1%]
- A family member [0.9%]
- Social media [4.8%]
- Newspaper [0.4%]
- Other: _____ [4.8%]

CBDL board member
CBDL meeting
community meeting
Direct involvement
Mark Stedman
member of CBDL
Task Force Chair
VN Research (x 3)

Q14. What, in your opinion, are the responsibilities of the Columbia Basin Development League? *Check all that apply*

- See that the Columbia Basin Project is completed [57.6%]
- Address the depletion of the Odessa Aquifer [54.5%]
- Maintain existing irrigation infrastructure [38.8%]
- Advocate for local funding/support [46.3%]
- Advocate for state funding/support [57.6%]
- Advocate for federal funding/support [64.7%]
- Address other community concerns (Please specify): _____ [11.4%]

Addressing climate change and a future with limited water resources
Advocate for optimal allocation and management of water whether CBP, state, or private
Advocate for stakeholders in Ecbid issues.

all of the above
Can't pick and choose what gets water. Must complete all of the East High area equally!
Complete the entire project and the other concerns take care of themselves. Advocate that our Federal elected officials fulfill the 1943 act of Congress or change the law. Their dithering with completing the Project has done great harm to the Basin. In 2008 the Feds wasted billions at Hanford with little to nothing to show for it. What a pity part of that helicopter money couldn't have been better spent finishing the Project. A colossal missed opportunity!
Completion of the project in all areas is 2nd to OA solutions for communities and irrigators.
Drinking water availability
educate citizens
Educate others about the project, its purpose, and its opportunities
Engage in environmental effects from diversions and groundwater extraction
Environmental benefits of the irrigation system
environmental sustainability
Garner public support by ensuring that all of the multiple benefits of the CBIP are adequately supported, including environmental and recreational.
Maintain public access to federal and state lands
Message the need for private investment
Moses Lake water quality
Promote a positive public view of the Project
Promote water conservation, water banking, and water efficiency and pay farmers to retire and stop draining the Odessa aquifer.
Represent the landowners in matters dealing with agencies involved in the project's future.
support the existing project operations
The League should be more supportive and helpful in regard to pushing for funding to help farmers build the various EL systems from the East Low Canal.
Whatever you can make a positive difference

zip. What is the zip code of your primary residence? _____ **[OPEN ENDED w number qualifier]**

	Frequency	Valid Percent	Area
No zip code	36	-	
59870	1	0.46%	Missoula, MT
83702	1	0.46%	Boise, ID
97004	1	0.46%	Clackamas County, OR
97031	1	0.46%	Hood River, OR
97801	1	0.46%	Pendleton, OR
98012	1	0.46%	Bothell, WA
98023	1	0.46%	Federal Way, WA
98115	1	0.46%	Seattle, WA
98117	1	0.46%	Seattle, WA
98177	1	0.46%	Seattle/Shoreline, WA
98225	1	0.46%	Bellingham, WA
98407	1	0.46%	Tacoma, WA

98501	2	0.91%	Olympia, WA
98502	1	0.46%	Olympia, WA
98506	1	0.46%	Olympia, WA
98513	1	0.46%	Olympia, WA
98532	1	0.46%	Chehalis, WA
98613	1	0.46%	Klickitat County, WA
98801	3	1.37%	Wenatchee, WA
98802	3	1.37%	East Wenatchee, WA
98807	1	0.46%	Wenatchee, WA
98815	1	0.46%	Cashmere, WA
98823	14	6.39%	Ephrata, WA
98826	2	0.91%	Leavenworth, WA
98832	1	0.46%	Marlin/Krupp, WA
98837	33	15.07%	Moses Lake, WA
98841	1	0.46%	Omak, WA
98848	4	1.83%	Quincy, WA
98851	2	0.91%	Soap Lake, WA
98853	1	0.46%	Stratford, WA
98857	7	3.20%	Warden, WA
98860	1	0.46%	Wilson Creek, WA
98903	1	0.46%	Yakima, WA
98908	6	2.74%	Yakima, WA
98926	1	0.46%	Ellensburg, WA
98936	1	0.46%	Yakima/Moxee, WA
98942	1	0.46%	Yakima/Selah, WA
98948	1	0.46%	Toppenish, WA
98953	1	0.46%	Zillah, WA
99004	1	0.46%	Cheney, WA
99016	1	0.46%	Spokane Valley, WA
99017	1	0.46%	Lamont, WA
99116	2	0.91%	Coulee Dam, WA
99118	1	0.46%	Curlew, WA
99122	2	0.91%	Davenport, WA
99123	1	0.46%	Electric City, WA
99133	2	0.91%	Grand Coulee, WA
99134	1	0.46%	Harrington, WA
99159	11	5.02%	Odessa, WA
99163	2	0.91%	Pullman, WA
99166	1	0.46%	Republic, WA
99169	10	4.57%	Ritzville, WA
99173	1	0.46%	Spingdale, WA
99185	1	0.46%	Wilbur, WA
99201	1	0.46%	Spokane, WA
99205	1	0.46%	Spokane, WA
99208	1	0.46%	Spokane, WA
99218	1	0.46%	Spokane, WA
99223	1	0.46%	Spokane, WA
99274	1	0.46%	Invalid ZIP

99301	23	10.50%	Tri-Cities, WA
99323	1	0.46%	Pasco/Burbank, WA
99326	8	3.65%	Connel, WA
99328	1	0.46%	Dayton, WA
99330	1	0.46%	Eltopia, WA
99337	1	0.46%	Kennewick, WA
99338	3	1.37%	Kennewick, WA
99341	4	1.83%	Lind, WA
99343	2	0.91%	Mesa, WA
99344	13	5.94%	Othello, WA
99347	1	0.46%	Pomeroy, WA
99349	2	0.91%	Mattawa, WA
99350	1	0.46%	Prosser, WA
99352	2	0.91%	Richland, WA
99357	3	1.37%	Royal City, WA
99361	2	0.91%	Waitsburg, WA
99403	2	0.91%	Clarkston, WA
Total	255	219	

Appendix C: Crosstabulations of Key Questions across Groups

Each question of the survey was analyzed across four groups: (1) the total sample (2) elected officials, (3) landowners/farmers/growers, and (4) individuals who had never heard of the League. This appendix includes the breakdown for each of these groups by each question on the survey. Columns may not add up to 100% due to rounding error. If a question allowed respondents to select more than one option, no column percent is calculated, and a dash is present instead.

In your opinion, what is the most important problem facing the Columbia Basin area today? Please note: The Columbia Basin includes Adams, Franklin, Grant, and Lincoln County.				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/ GROWER	NEVER HEARD OF CBDL
Environmental issues	15%	15%	10%	32%
Local economy	13%	11%	12%	12%
Ground water use	56%	63%	57%	28%
Something else	16%	11%	21%	28%
TOTAL	100%	100%	100%	100%

How familiar are you with the “Columbia Basin Project”?				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/ GROWER	NEVER HEARD OF CBDL
Extremely	26%	30%	30%	4%
Very	42%	22%	44%	24%
Somewhat	23%	37%	17%	44%
A little	7%	11%	5%	4%
Not at all	3%	0%	3%	24%
TOTAL	101%	100%	99%	100%

To the best of your knowledge, the Columbia Basin Project is a _____ project.				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Local	5%	0%	3%	6%
State	6%	4%	4%	11%
Federal	89%	96%	93%	83%
TOTAL	100%	100%	100%	100%

I am concerned about water availability in one or more of the following counties: Grant, Adams, Lincoln, or Franklin.				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Strongly Agree/Agree	91%	93%	94%	68%
Strongly Disagree/Disagree	6%	4%	5%	24%
Don't Know/Not sure	3%	4%	1%	8%
TOTAL	100%	101%	100%	100%

Enough is being done to secure a sustainable water supply/source in the county where I live or work.				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Strongly Agree/Agree	32%	23%	29%	38%
Strongly Disagree/Disagree	59%	65%	65%	33%
Don't Know/Not sure	9%	12%	6%	30%
TOTAL	100%	100%	100%	101%

When it comes to water availability, what are your biggest concerns? Check all that apply				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/ GROWER	NEVER HEARD OF CBDL
Depletion of the ground water/aquifer	65%	74%	71%	44%
Availability of water for irrigation	59%	56%	71%	32%
Availability of drinking water	42%	63%	48%	32%
Availability of water for food processing	29%	44%	37%	12%
Overall environmental impacts of water usage	26%	15%	20%	36%
Overall economic impacts of water depletion	49%	70%	50%	36%
Other	9%	11%	9%	12%
TOTAL	-	-	-	-

What, in your opinion, are the best steps to take to address water availability?				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/ GROWER	NEVER HEARD OF CBDL
Expand current irrigation infrastructure	54%	54%	62%	29%
Diversify our local economy to include other industries beyond agriculture	7%	4%	7%	12%
Increase funding to expand to other water sources	24%	29%	20%	29%
Other	16%	13%	12%	29%
TOTAL	101%	100%	101%	99%

Water depletion of the Odessa Aquifer				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Very important	67%	67%	65%	48%
Somewhat important	24%	30%	24%	36%
Not too important	4%	0%	5%	4%
Not at all important	2%	4%	3%	0%
Don't Know/Not sure	3%	0%	3%	12%
TOTAL	100%	101%	100%	100%

Completing the Columbia Basin Project (in other words, expanding current irrigation infrastructure to unserved lands)				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Very important	63%	67%	67%	40%
Somewhat important	24%	15%	25%	28%
Not too important	6%	7%	5%	4%
Not at all important	6%	4%	4%	20%
Don't Know/Not sure	2%	7%	0%	8%
TOTAL	101%	100%	101%	100%

Decreasing water use for irrigation				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Very important	20%	15%	19%	33%
Somewhat important	28%	27%	27%	25%
Not too important	19%	27%	20%	4%
Not at all important	25%	23%	27%	25%
Don't Know/Not sure	8%	8%	7%	13%
TOTAL	100%	100%	100%	100%

Better maintenance of current or existing irrigation infrastructure				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Very important	43%	26%	43%	60%
Somewhat important	40%	48%	38%	24%
Not too important	14%	19%	15%	4%
Not at all important	2%	4%	3%	8%
Don't Know/Not sure	2%	4%	2%	4%
TOTAL	101%	101%	101%	100%

Updating/fixing dated or failing irrigation infrastructure				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Very important	57%	59%	54%	64%
Somewhat important	32%	30%	35%	24%
Not too important	6%	4%	6%	4%
Not at all important	3%	7%	5%	4%
Don't Know/Not sure	2%	0%	2%	4%
TOTAL	100%	100%	102%	100%

Recreation in the Columbia Basin				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Very important	28%	22%	23%	52%
Somewhat important	37%	37%	41%	20%
Not too important	25%	37%	26%	20%
Not at all important	9%	4%	10%	8%
Don't Know/Not sure	1%	0%	0%	0%
TOTAL	100%	100%	100%	100%

It is the responsibility of locally elected officials to secure water sources for our region's future.				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Strongly Agree	32%	8%	32%	25%
Agree	44%	62%	45%	46%
Disagree	15%	19%	16%	13%
Strongly Disagree	5%	8%	5%	8%
Don't Know/Not sure	4%	4%	3%	8%
TOTAL	100%	101%	101%	100%

It is the responsibility of state elected officials to complete the Columbia Basin Project.				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Strongly Agree	31%	19%	32%	24%
Agree	37%	44%	39%	32%
Disagree	19%	19%	21%	12%
Strongly Disagree	8%	11%	6%	20%
Don't Know/Not sure	4%	7%	3%	12%
TOTAL	99%	100%	101%	100%

It is the responsibility of federally elected officials to complete the Columbia Basin Project.				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Strongly Agree	61%	70%	66%	32%
Agree	25%	22%	24%	28%
Disagree	5%	0%	5%	8%
Strongly Disagree	6%	0%	3%	20%
Don't Know/Not sure	3%	7%	2%	12%
TOTAL	100%	99%	100%	100%

It is the responsibility of the Columbia Basin Development League to secure reliable water sources for our region's future.				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Strongly Agree	26%	15%	24%	22%
Agree	39%	46%	43%	17%
Disagree	18%	19%	17%	7%
Strongly Disagree	7%	4%	7%	22%
Don't Know/Not sure	10%	15%	9%	35%
TOTAL	100%	99%	100%	103%
To the best of your knowledge, which of the following do you believe are the top two sources of funding for the irrigation infrastructure used by the Columbia Basin region? Select two options				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Local taxes	7%	4%	6%	24%
Food processing fees	3%	4%	3%	4%
Irrigator Assessments	54%	48%	64%	44%
Federal Grants	64%	74%	77%	76%
State Grants	34%	37%	36%	24%
Private donors	4%	4%	2%	8%
Other types of funding	6%	15%	6%	4%
Don't know/Can't say	7%	15%	5%	16%
TOTAL	-	-	-	-

Select the top 2 MAIN SOURCES you turn to for information about community issues?				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Television	6%	4%	8%	8%
Newspaper	32%	44%	35%	36%
Radio	11%	33%	16%	24%
Word of mouth	16%	11%	19%	12%

Internet	43%	41%	43%	44%
Direct mail, newsletters	26%	30%	32%	12%
Social media	12%	4%	13%	24%
Community newspapers	25%	26%	31%	28%
Something else	6%	7%	3%	12%
TOTAL	-	-	-	-

How did you first hear about this survey?				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Email from Columbia Basin Development League	72%	67%	66%	40%
Postcard in the mail	6%	4%	9%	28%
Columbia Basin Development League newsletter	7%	15%	10%	0%
Link on Columbia Basin Development League website	2%	0%	2%	4%
A friend	3%	4%	2%	12%
A family member	1%	0%	0%	0%
Social media	5%	0%	5%	12%
Newspaper	0%	0%	1%	0%
Other	5%	11%	5%	4%
TOTAL	101%	101%	100%	100%

Before taking this survey, had you heard of the “Columbia Basin Development League” or “the League”?				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Yes	89%	82%	91%	0%
No	10%	15%	9%	88%
I'm not sure	1%	4%	1%	12%
TOTAL	100%	101%	101%	100%

[If League member or volunteer] How satisfied are you with the work the Columbia Basin Development League has done in the past few years?				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
Very satisfied	41%	27%	42%	n/a
Somewhat satisfied	48%	68%	44%	n/a
Not very satisfied	10%	5%	12%	n/a
Not at all satisfied	2%	0%	2%	n/a
TOTAL	101%	100%	100%	0%

[If League member or volunteer] What, in your opinion, are the responsibilities of the Columbia Basin Development League? Check all that apply				
	TOTAL SAMPLE	ELECTED OFFICIALS	LANDOWNER/FARMER/GROWER	NEVER HEARD OF CBDL
See that the Columbia Basin Project is completed	58%	63%	67%	n/a
Address the depletion of the Odessa Aquifer	55%	59%	64%	n/a
Maintain existing irrigation infrastructure	39%	33%	47%	n/a
Advocate for local funding/support	46%	44%	50%	n/a
Advocate for state funding/support	58%	67%	67%	n/a
Advocate for federal funding/support	65%	70%	74%	n/a
Address other community concerns	11%	11%	12%	n/a
TOTAL	-	-	-	-

Appendix D: Methodology for Determining Respondent Region from Zip Code

Respondents were asked to provide their zip code. These zip codes were connected to corresponding regions, most often cities, to make analysis of geographic regions more comprehensible. The scheme for connecting zip to region went as follows:

If a Zip was in a census recognized metro area, it was assigned to that main city; if the Zip was not part of a metro area but contained one or more cities, it was assigned to the largest city contained in the Zip area; and if a Zip contained no cities and only unincorporated territories, the Zip area was named after the largest census designated place. Zips were assigned to the County if the area's census designated places lacked significant variations in size.