To participate in the online version of this survey, please visit: http://areaf.rdos.bc.ca/cms/WBWaterSurvey.

If you have already registered for the survey, you should have received an email message with the title: “An invitation to participate in the West Bench Water Upgrade Survey”. If not, please contact mbrydon@rdos.bc.ca

The purpose of West Bench Water Upgrade Survey is to permit residents to express preferences and identify concerns regarding upgrades to the West Bench water system. The survey is not binding, it is only an opportunity to hear from voters relatively early in the decision process before a single preferred alternative is brought before residents in a formal borrowing referendum later in the year.

A few instructions for you….

1. **If you are responding electronically to the survey, please do not mail in the hard copy. The electronic version of the survey contains all of the background information for the questions. To save on paper these sections have been removed from the printed version. All of the background material is available for viewing at the RDOS office, the Penticton Library, and on the RDOS website**.
2. **This survey is long and a lot of information is available to help with this important decision**.
3. At the request of the Board of the West Bench Irrigation District (WBID) the WBID was dissolved by a provincial Order-In-Council on 9 June, 2011, and **all responsibility for the West Bench water system was passed to the Regional District of Okanagan-Similkameen (RDOS)**. The transfer was seen as necessary because irrigation districts in British Columbia are ineligible for provincial grants. West Bench residents are represented on the RDOS Board through the election of the Area 'F' Director every three years.
4. The West Bench is a rural, unincorporated area. As such, **water and other services are not provided as part of your property taxes** as they might be within a municipality. Previously, the WBID was established as the water purveyor for the West Bench and all residents of the neighborhood were responsible for the costs of building, maintaining, and operating the system. This does not change under the regional district "service area" model. A key principle of regional districts in British Columbia is that rural residents only get the services they pay for (and only pay for the services they get).
5. Although several of the water upgrade options currently under consideration involve the City of Penticton, **a boundary expansion of Penticton to include the West Bench is not currently under consideration**. Such a boundary expansion would involve complex costs and benefits for both sides. For example, West Bench taxes would almost certainly rise to City of Penticton levels. On the other hand, the City of Penticton would take on responsibility for much aging infrastructure, including West Bench roads, which, like all rural roads in British Columbia, are currently the responsibility of the provincial Ministry of Transportation and Infrastructure. In short, a boundary expansion is neither obviously good nor bad and will require much more input and deliberation. **Questions on boundary expansion are included on this survey simply to determine if this is something residents want explored further in the future**. However, any water arrangement with the City of Penticton should be seen for what it is: An arms-length transaction between two local governments that is intended to provide economic benefits to both sides. Boundary expansion is a different issue for a different day.
6. **The Sage Mesa water system is not part of the current upgrade project**. The RDOS has absolutely no jurisdiction or authority with respect to the Sage Mesa water system. However, all water systems in British Columbia will be required to achieve the same standards and the Sage Mesa system will have to be upgraded eventually. Given the proximity of the two systems and the economies of scale in water systems, we assume that the ultimate outcome will be a single combined West Bench and Sage Mesa system. This assumption appears from time to time in our cost estimates for the various options.
7. The results of the survey will be used by the RDOS when identifying a single preferred alternative to be brought before residents in a formal borrowing referendum later in the year. **This survey is not binding. Nor is it a replacement for a formal referendum**. Instead, it is an opportunity for the RDOS to hear from voters relatively early in the decision process.

Thank you for taking the time to learn about the West Bench water system and be involved in a very important investment for your neighborhood.

Michael Brydon
Director, Electoral Area 'F'
Regional District of Okanagan-Similkameen

There are 34 questions in this survey

Attitudes

The purpose of this first section of the survey is to better understand your general attitudes. We will ask questions about specific upgrade alternatives later in the survey. In addition, you will be given ample space later in the survey to voice any general concerns you may have about the decision process or the alternatives under consideration.

QUESTION 1: The RDOS is continuing the water system upgrade project initiated by the West Bench Irrigation District. Based on your understanding of the water situation, what problem (or problems) is the upgrade meant to address ?

Please choose **all** that apply:

- ☐ Old and unreliable infrastructure (e.g., underground water pipes)
- ☐ An impending shortage of water in the Okanagan Valley
- ☐ Current water treatment does not satisfy the disinfection requirements of IHA
- ☐ Problems with the water intake, wet well and pump house on Okanagan Lake
- ☐ None of these
- ☐ Don't know/can't say
- ☐ Other:

Tradeoffs are inevitable in large infrastructure projects. Several potential tradeoffs in the West Bench water system are listed below. For each, please indicate your preference by clicking the small circle under the left-most option, the right-most option, or somewhere in the middle.

Please choose the appropriate response for each item:

QUESTION 2: Cost of system versus reliability of water quality	Lower cost	○ ○	Neutral	○ ○	Satisfy IHA water quality standards in all situations
QUESTION 3: Local control versus cost	Local control of the system and all policies	○ ○	Neutral	○ ○	Cede control to benefit from economies of scale
QUESTION 4: Timing of repayment	Repay the cost soon as possible (e.g., 20 years)	○ ○	Neutral	○ ○	Smooth costs over expected life of project (e.g., 50 years)
QUESTION5: Quality of the upgrade	Do it right	○ ○	Neutral	○ ○	Quick fix
QUESTION 6: Billing structure	Favor a flat per-connection charge	○ ○	Neutral	○ ○	Favor a charge based on actual water consumption
QUESTION 7: Watering restrictions	Few restrictions on water use	○ ○	Neutral	○ ○	Restrictions on "non working" water use (i.e., water for ornamental purposes such as lawns)

Some of the options presented here involve the purchase of filtered water from the City of Penticton. However, the West Bench is part of rural Area 'F' of the RDOS and lies entirely outside of the City of Penticton's boundaries. West Bench residents have no representation on Penticton City Council. To some residents, this is a strike against any arrangement with Penticton. To others it is not a problem (after all, the West Bench already buys many important services from the City of Penticton, including fire protection, library, and operation and maintenance of the water system).

*

QUESTION 8: Which of the following best reflects your view on the relationship between the City of Penticton and the West Bench water system?

Please choose **only one** of the following:

- ○ I believe we can count on the City of Penticton to do what is right for the West Bench.
- ○ I believe an acceptable partnership with Penticton is possible but only if the rights and obligations of both parties are carefully defined in a formal contract.
- ○ I do not believe a partnership with the City of Penticton for water is in the best interests of West Bench residents.
- ○ Don't know/can't say

QUESTION 9: The proximity of the West Bench to the City of Penticton means that expansion of city limits to include the greater West Bench (including Sage Mesa, etc.) is an idea that arises from time to time both on the West Bench and in the City of Penticton. Keeping in mind the previous caveats regarding boundary expansion, please indicate your level of support for the statements below:

Please choose the appropriate response for each item:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/can't say
I believe the greater West Bench should be become part of the City of Penticton.	○	○	○	○	○	○
Rural areas and municipalities are too different to permit easy combination.	○	○	○	○	○	○
I would be willing to pay higher city taxes in order to get better city services.	○	○	○	○	○	○
I believe rural residents would see reduced taxes if Penticton took over the West Bench.	○	○	○	○	○	○

Alternatives
Three upgrade alternatives were presented in the July 2011 newsletter and open house:

1. The purchase of filtered water in "bulk" from the City of Penticton.
2. The construction of a stand-alone ultra-violet treatment system to supply the West Bench.
3. An extra-territorial service in which the City of Penticton provides filtered water and takes over ownership and operation of the West Bench water system.

A difficulty arises when comparing the economic impact of these alternatives due to the significant differences in the timing of cashflows. Some of the alternatives, such as the UV option, have high up-front (capital) costs but relatively low operating costs. The Penticton options, in contrast, have lower capital costs but involve higher payments (including increases for inflation) to the City of Penticton. In order to make an apples-to-apples comparison, the total cost of each of the alternatives (including capital cost, borrowing costs, operating costs, and inflation) was estimated over the 20 year term of the loan and presented at the open house as a single "present value".

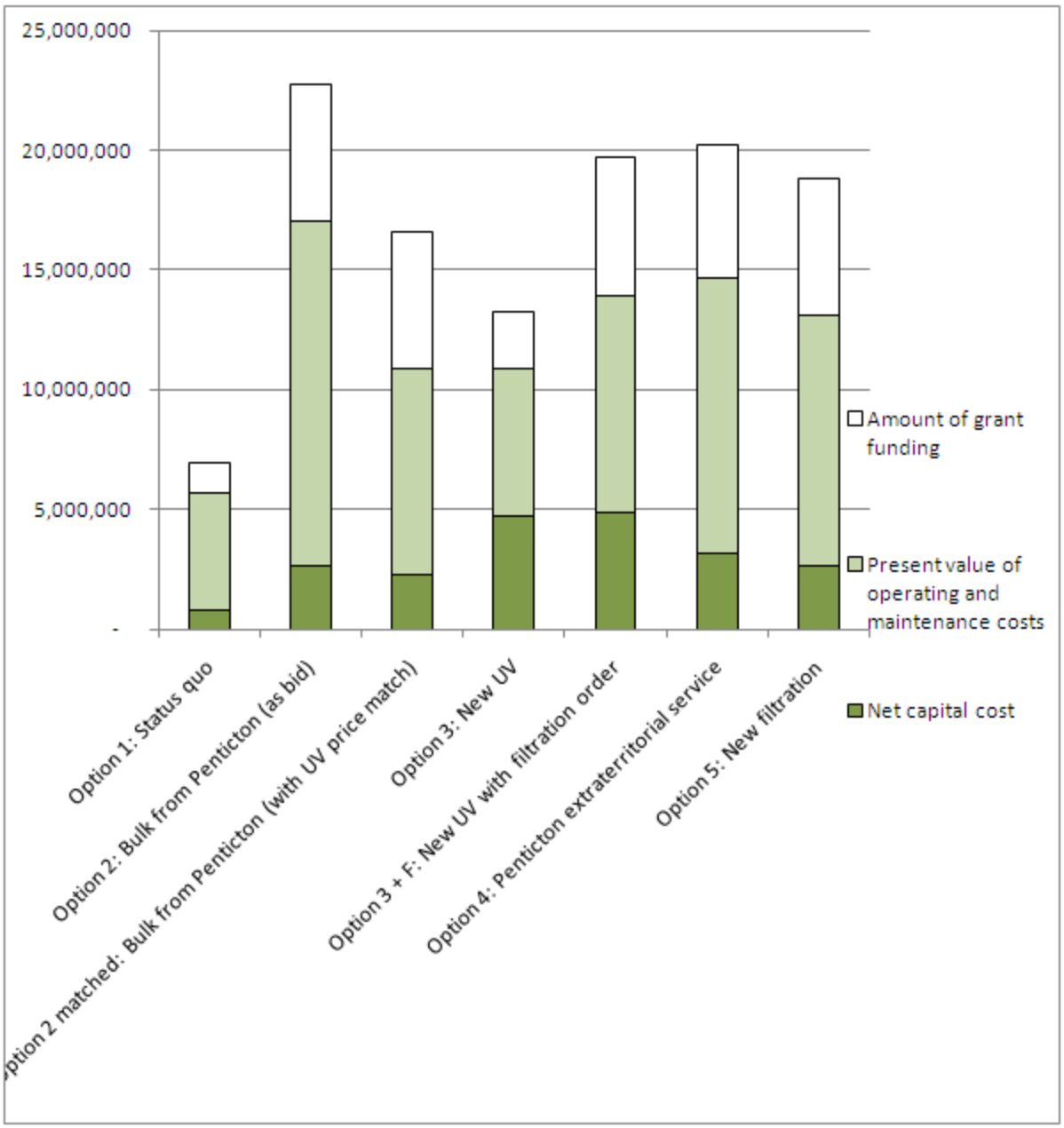
As you may recall, each of the three alternatives had a similar present value when estimated in this way. However, three important issues arose during the open house discussion:

1. **The 20-year evaluation horizon was deemed to be too short.** In particular, the 20-year horizon ignores the impact of paying off the debt for the stand-alone options and operating "mortgage free" until the asset needs replacement. A 50-year horizon more accurately represents the true useful life of the assets.

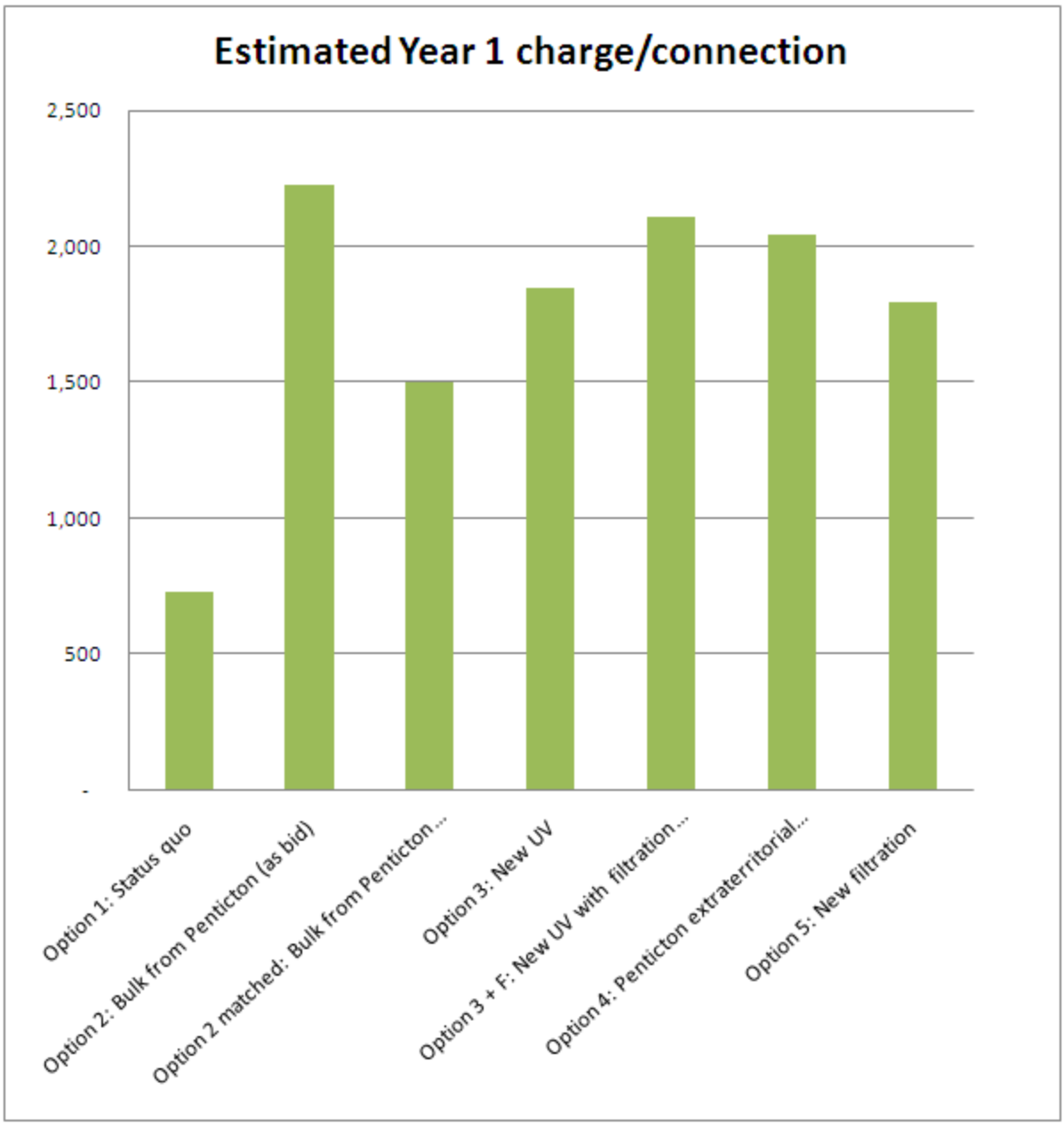
2. **The impact of "latecomer fees" from Sage Mesa had not been factored into the open house estimates**. Interior Health will eventually require upgrades to the Sage Mesa water system and consolidation of the two systems will be an obvious win-win. However, consolidation will trigger latecomers' fee in which Sage Mesa residents buy-in to existing treatment infrastructure. The impact of latecomer fees can be significant for the stand-alone options; however, the latecomer fees flow mostly to Penticton in the Penticton options.

3. **The potential for a stand-alone filtration alternative was not fully investigated.** Typically, UV treatment is much cheaper than filtration. However, recall that we have a second "filtration only" grant that could be used to offset the additional cost of a stand-alone filtration plant.
   The one thing that each of these issues has in common is that they all work in favor of a stand-alone treatment plant (either UV or filtration) and work against the City of Penticton options. Accordingly, we have met with City of Penticton staff and selected members of Penticton City Council to let them know that their current bids are uncompetitive over the 50-year horizon. We have not, to this point, received any firm indication that they are willing to bring their prices in line with the stand-alone alternatives. However, we know that they certainly have the *ability* to be the low-cost bidder: Their water treatment plant has capacity and the marginal cost to the City of meeting the relatively modest water demands of the West Bench are quite small. Accordingly, we have included a "matched price" version of the Penticton Bulk Water alternative in this survey.

   A summary of the estimated costs is shown below. You can also download a higher-resolution version of this graph for reference. Note that the white box indicates grants so the net estimated cost of each alternative is the height of the two colored bars.



Another way to look at costs is your estimated Year 1 water bill. Although your water bill will change over time, the Year 1 cost provides some indication of whether the costs of the option are front-end loaded or spread evenly over time. A summary of Year 1 costs is shown below. You can also download a higher-resolution version of this graph for reference.



For more detailed information about each of the alternatives, you can consult the 2011 report on upgrade options by Focus Engineering found on the RDOS web site. The Area F website also has a section dedicated to a discussion of West Bench water issues and provides a mechanism for you to post comments.

QUESTION 10: In the following pages, you will be presented with a brief description of each option and an "approval rating" scale. The brief description includes:

- A list of the very generic "pros" and "cons" already identified at the open house.
- An estimate of the present value of the alternative, net of all costs (capital, operating, debt, inflation) and grants. These are the same as in the bar chart above.
- An estimate of the Year 1 annual water tax for an "average" parcel. Please keep in mind that this is only a rough estimate of your future water bill--we do not know what construction costs will be until we receive bids from contractors. Also, the prices shown here are only relevant if your water use is close to the average.

Once you have rated the acceptablility of the alternative, you are provided some space to add any "pros" and/or "cons" that you think have been missed and make any comments you wish to make about the alternative.

Option 1: Status Quo

As discussed in the newsletter and at the open house, the status quo is not really a solution to the West Bench water problem since the Certificate of Operation for the system is conditional on progress being made towards Interior Health water quality standards.

Instead, status quo is what happens if there is another "no" vote in the borrowing referendum (tentatively scheduled for this fall). This option involves repairing and upgrading existing infrastructure only, without treatment upgrades, so that the water system will function on a day-to-day basis until the next referendum can be organized or pending a health order.

An overwhelming lack of support for the alternatives presented in this survey does not mean a water upgrade will be avoided. Rather, lack of support for these alternatives simply means the RDOS will have to restart the process (with all the costs and effort which that entails).
If you indicate support for the status quo option over the others presented here, you will be asked to provide us with what you believe is a better alternative.

Summary of Option 1: Status quo	
Estimated present value net of capital costs, grants, operating costs, interest, and inflation (50 years, interest = 6%, inflation = 3%)	$6M
Estimated average water bill for Year 1	$730/year/connection
Pros	**Cons**
Buys time for new options (but which?)	Solves nothing--water is not acceptable under IHA regulations Does not fully utilize grant money; no guarantee of new grant money when treatment upgrade is undertaken Risks health order due to unsafe water

QUESTION 11: Please indicate your level of support for this option. *Please choose **only one** of the following:

- ○ I am strongly against this option
- ○ I am against this option
- ○ I am neutral regarding this option
- ○ I support this option
- ○ I strongly support this option
- ○ Don't know/can't say

QUESTION 12:
Briefly, is there anything that you like about this option that is not included in the list of "pros" above?
Please write your answer here: _____

_____

QUESTION 13:
Briefly, is there anything that you dislike about this option that is not included in the list of "cons" above?

Please write your answer here: _____

_____

QUESTION 14:
If you indicated support for this option and thus we assume you have an alternative in mind that is not reflected in this survey or some other broad concern with the decision process. Please use the space below to either describe your preferred alternative or voice your concern. _____

_____

Option 2: Bulk water purchased from Penticton

This option involves purchasing bulk water from the City of Penticton. The existing West Bench system would be upgraded to tie into Penticton's distribution system. Upgrades would include a new pump station to pump filtered water from Penticton to West Bench. Old distribution water mains will be replaced and water meters will be installed. The RDOS will own and operate the water distribution and storage facilities on the West Bench and the new pump station in Penticton.

Summary of Option 2: Bulk water purchased from Penticton	
Pros	**Cons**
• Filtered water: certain to be IHA compliant • Local control over water delivery infrastructure • Some economies of scale if Sage Mesa joins	• Some reliance on Penticton
Scenario 1: Current bid price The cost of the system using the City of Penticton's bid price as of 28 July, 2011 ** Includes an allowance for Sage Mesa latecomers fees*	
Estimated present value net of capital costs, grants, operating costs, interest, and inflation (50 years, interest = 6%, inflation = 3%)	$17M
Estimated average water bill for Year 1	$2,300/year/connection
Scenario 2: Matching bid price The cost of the system if the City of Penticton matches the 50-year cost of the UV option **Assumes the City of Penticton matches 50-year cost of UV; includes an allowance for Sage Mesa latecomers fees*	
Estimated present value net of capital costs, grants, operating costs, interest, and inflation (50 years, interest = 6%, inflation = 3%)	$11M
Estimated average water bill for Year 1	$1,500/year/connection

QUESTION15: Assume that the City of Penticton is unable or unwilling to match the price of the UV option. Please indicate your level of support for this option under the "current bid price" scenario above. *

Please choose **only one** of the following:

- ○ I am strongly against this option
- ○ I am against this option
- ○ I am neutral regarding this option
- ○ I support this option
- ○ I strongly support this option
- ○ Don't know/can't say

QUESTION 16: Assume that the City of Penticton matches the price of the UV option. Please indicate your level of support for this option under the "matching bid price" scenario above. *

Please choose **only one** of the following:

- ○ I am strongly against this option
- ○ I am against this option
- ○ I am neutral regarding this option
- ○ I support this option
- ○ I strongly support this option
- ○ Don't know/can't say

QUESTION 17: Briefly, is there anything that you like about this option that is not included in the list of "pros" above? Please write your answer here:

_____

_____

QUESTION 18: Briefly, is there anything that you dislike about this option that is not included in the list of "cons" above?
Please write your answer here:

_____

_____

QUESTION 19: Do you have any questions or additional comments about this alternative?
Please write your answer here:

_____

_____

Option 3: New stand-alone ultra-violet (UV) treatment plant

This option provides a completely new water supply for West Bench residents, including a new intake from Okanagan Lake and pump station. Water will be chlorinated at the pump station and then UV disinfected at the reservoir. Old distribution water mains will be replaced and water meters will be installed. Considerations are in the plan for a future filtration site. This option will not meet IHA standards unless filtration deferral is approved by IHA.

Summary of Option 3: New stand-alone ultra-violet (UV) treatment plant	
Pros	**Cons**
• UV treated water: IHA compliant if source water quality criteria are met • Complete local control of system including treatment and delivery • Economies of scale if Sage Mesa joins	• Requires filtration deferral from Interior Health • More susceptible to turbidity and color • Some risk of boil water orders or, in the worst case, an order to upgrade to filtration
Scenario 1: Successful filtration deferral The cost of the system if source water quality remains high and the UV treatment system remains IHA compliant in the long term ** Includes an allowance for Sage Mesa latecomers fees*	
Estimated present value net of capital costs, grants, operating costs, interest, and inflation (50 year, interest = 6%, inflation = 3%)	$11M
Estimated average water bill for Year 1	$1,800/year/connection
Scenario 2: Permanent filtration deferral is unsuccessful and filtration must be added to the treatment train The cost of the system if, at some point down the road, IHA requires that filtration be added to the UV system. For this calculation, we assume: • the $3M treatment plant is added at the start of Year 11 • senior governments (Federal and Provincial) will cover 2/3 of the cost with grants (this is a best-case assumption) ** Includes an allowance for Sage Mesa latecomers fees*	
Estimated present value net of capital costs, grants, operating costs, interest, and inflation (50 year, interest = 6%, inflation = 3%)	$14M
Estimated average water bill for Year 1	Same as UV in Year 1, increasing by about $300/year/connection after filtration is added

QUESTION 20: Please indicate your level of support for this option. Keep in mind that a filtration plant may have to be added in the future if IHA's filtration deferral is revoked (as in Scenario 2 above). *
Please choose **only one** of the following:

Please choose **only one** of the following:

- ○ I am strongly against this option
- ○ I am against this option
- ○ I am neutral regarding this option
- ○ I support this option
- ○ I strongly support this option
- ○ Don't know/can't say

QUESTION 21: Briefly, is there anything that you like about this option that is not included in the list of "pros" above? Please write your answer here:

_____

_____

QUESTION 22: Briefly, is there anything that you dislike about this option that is not included in the list of "cons" above?
Please write your answer here:

_____

_____

QUESTION 23: Do you have any questions or additional comments about this alternative?
Please write your answer here:

_____

_____

Option 4: Extraterritorial System (ETS) provided by Penticton

This the option presented in the 2010 referendum. It ties West Bench into Penticton's water supply as an extra territorial service. Water service will be extended through a connection to Penticton's distribution system and the City will own and operate the West Bench water system. A booster station will be constructed as well as various pipeline replacements and reservoir upgrades. In addition to capital costs, there will be costs for purchasing capacity of the City's water treatment plant, and City administration.

Summary of Option 4: Extra-Territorial System (ETS) provided by Penticton	
Pros	**Cons**
• Filtered water: certain to be IHA compliant • Most efficient • Transfers some infrastructure risk to Penticton (at a cost)	• Penticton reaps all latecomer fees • Little control over rates and policies
Estimated present value net of capital costs, grants, operating costs, interest, and inflation (50 year, interest = 6%, inflation = 3%)	$15M
Estimated average water bill for Year 1	$2,100/year/connection

QUESTION 24: Please indicate your level of support for this option. *

Please choose **only one** of the following:
- ○ I am strongly against this option
- ○ I am against this option
- ○ I am neutral regarding this option
- ○ I support this option
- ○ I strongly support this option
- ○ Don't know/can't say

QUESTION 25: Briefly, is there anything that you like about this option that is not included in the list of "pros" above? Please write your answer here:

_____

_____

QUESTION 26: Briefly, is there anything that you dislike about this option that is not included in the list of "cons" above?
Please write your answer here:

_____

_____

QUESTION 27: Do you have any questions or additional comments about this alternative?
Please write your answer here:

_____

_____

Option 5: New stand-alone filtration plant

This is a new option not presented in the July newsletter or open house. This option provides a completely new water supply for West Bench residents, including a new lake intake from Okanagan Lake and pump station. Water will be chlorinatepiped at the pump station and then filtered using a process similar to that used in Penticton and Summerland. Old distribution water mains will be replaced and water meters will be installed.

Summary of Option 5: New stand-alone filtration plant	
Pros	**Cons**
Filtered water: certain to be IHA compliant Complete local control Economies of scale if Sage Mesa joins	Replicates existing infrastructure in Penticton Complexity and operational risk
Estimated present value net of capital costs, grants, operating costs, interest, and inflation (50 year, interest = 6%, inflation = 3%) ** Includes an allowance for Sage Mesa latecomers fees*	$13M
Estimated average water bill for Year 1 ** Includes an allowance for Sage Mesa latecomers fees*	$1,800/year/connection

QUESTION 28: Please indicate your level of support for this option. *

Please choose **only one** of the following:

- ○ I am strongly against this option
- ○ I am against this option
- ○ I am neutral regarding this option
- ○ I support this option
- ○ I strongly support this option
- ○ Don't know/can't say

QUESTION 29: Briefly, is there anything that you like about this option that is not included in the list of "pros" above? Please write your answer here:

_____

_____

QUESTION 30: Briefly, is there anything that you dislike about this option that is not included in the list of "cons" above?

Please write your answer here:

_____

_____

QUESTION 31: Do you have any questions or additional comments about this alternative?

Please write your answer here:

_____

_____

Decision Process
The final set of questions provides us with some feedback regarding the decision process to this point.
QUESTION 32: Please indicate your level of agreement with the following statements: *
Please choose the appropriate response for each item:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know / can't say
I have enough information about the upgrade project to be confident about my preferences.	○	○	○	○	○	○
I still have many unanswered questions about the West Bench water upgrade project.	○	○	○	○	○	○
The information in the July RDOS newsletter about the water upgrade project was valuable to me.	○	○	○	○	○	○
The information on the RDOS websites (www.rdos.bc.ca and areaf.rdos.bc.ca) has been valuable to me.	○	○	○	○	○	○
The information provided in the July open house was valuable to me.	○	○	○	○	○	○
Based on all the information I have received, including this survey, I do not believe I have enough information to vote on this project in a borrowing referendum.	○	○	○	○	○	○

QUESTION 33:
Please indicate your overall level of satisfaction with the manner in which the RDOS has handled the West Bench water upgrade project since taking over from the WBID in June, 2011.
***
Please choose **only one** of the following:

- ○ Very unsatisfied
- ○ Moderately unsatisfied
- ○ Mixed feelings
- ○ Satisfied
- ○ Very satisfied
- ○ Don’t know/Cant say

34 We are looking for suggestions for making the decision process better. Do you have any ideas or constructive criticism?
Please write your answer here:

_____
_____
_____
_____

Thank you for completing this survey.