



**City of  
Courtenay**

# **Flood Management Plan Appendix E – Public Survey Results**



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## 1. Introduction

The City of Courtenay (City, Courtenay) initiated a Flood Management Plan project and retained Ebbwater Consulting Inc. (Ebbwater) and its team, including SHIFT Collaborative. The main report (Ebbwater Consulting Inc., 2024) <sup>1</sup> provides information regarding project goals, risk and resilience background, project area background, flood management plan approach, risk assessment results, option analysis, and recommended flood management strategies.

Two public surveys were used to gather input from the public, stakeholders and rights holders. A summary of responses to each of the surveys is provided below. This appendix was written by SHIFT Collaborative.

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<sup>1</sup> Ebbwater (2024): City of Courtenay Flood Management Plan. Prepared for the City of Courtenay.

## 2. Public Survey 1: Flood Impacts

### Q1 Which community do you currently reside in?

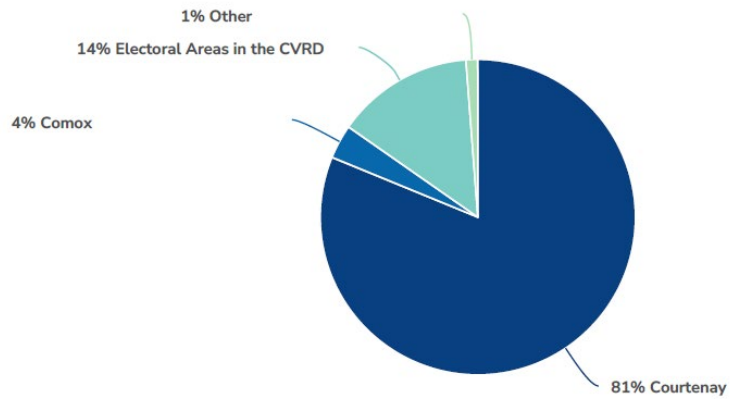


Figure 1. Participants' community of residence (N=85).

- Most respondents live in Courtenay (81%), followed by the electoral areas in the CVRD (19%)

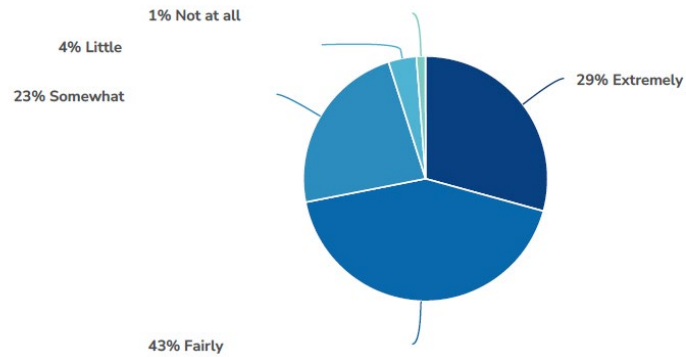
### Q2 What is your address?

- Data not included in this summary.

### Q3 Do you live in a floodplain?

- Most responded No (55%) or I don't know (27%)

**Q4 How familiar are you with how sea level rise and climate change will impact flood risk?**



*Figure 2. Participants' level of familiarity with how sea level rise and climate change will impact flood risk (N=82).*

- The majority answered Fairly (43%)
- 29% responded Extremely and 23% responded Somewhat

**Q5 Have you experienced flooding:**

- Most people have NOT experienced flooding in their current place of residence (90%) nor another place of residence in Courtenay (91%)

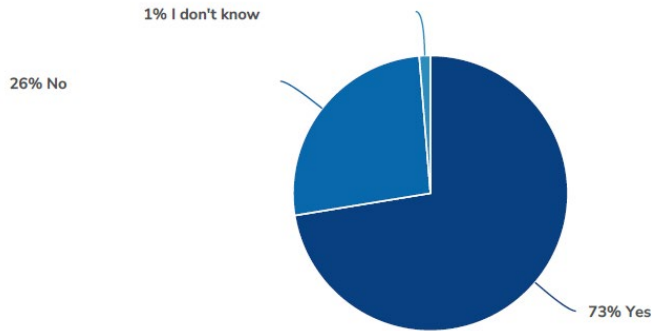
**Q6 What types of flood impacts did you or your household experience? (check all that apply)**

- Interruptions to transportation routes / accessibility
- Damages to land / property
- Interruptions to power or communications
- Evacuation

**Q7 Is there anything else you'd like to share about impacts described in Question #5?**

- Flood adaptation ideas (1)
- Personal flood story (1)
- Listen to where the water flows (1)

**Q8 Have you witnessed flooding happening for others / elsewhere in the City of Courtenay?**



*Figure 5. Participants' responses to whether they have witnessed flooding happening for others / elsewhere in the City of Courtenay (N=80).*

- Most responded yes (73%)

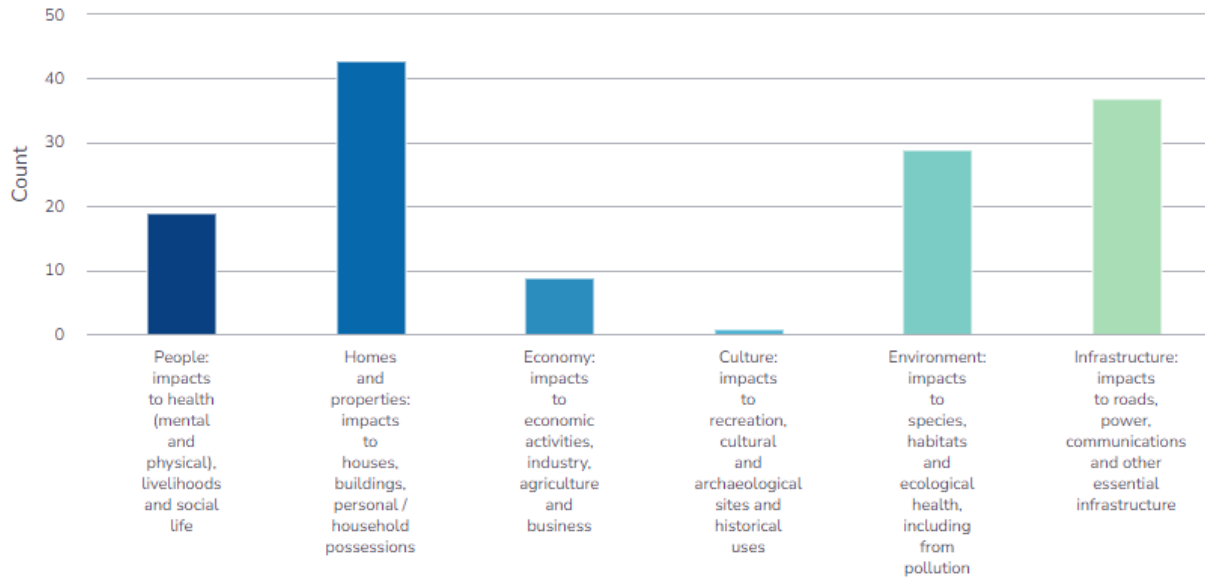
**Q9 If so, what types of flood impacts have you witnessed elsewhere in Courtenay? (check all that apply) (top 2 bolded)**

- **Infrastructure:** impacts to roads, power, communications, and other essential infrastructure (41 votes)
- **Homes and properties:** impacts to houses, buildings, personal / household possessions (37 votes)
- Environment: impacts to species, habitats and ecological health, including from pollution (35 votes)
- Economy: impacts to economic activities, industry, agriculture and business (34 votes)

**Q10 Is there anything else you would like to share (e.g. where and when did flooding occur, for whom) in relation to Question #9?**

- Local flood experiences and locations (17 responses)
- Flood adaptation ideas (2)
- Questions (1)
- International stories of flooding (1)

**Q11 Given the range of impacts predicted to occur in Courtenay due to flooding, which of these impacts are you most concerned about today? Choose up to two (2).**



*Figure 6. Flood impacts that participants are most concerned about today (N=71).*

- Homes and properties: impacts to houses, buildings, personal / household possessions (43 votes)
- Infrastructure: impacts to roads, power, communications and other essential infrastructure (37)
- Environment: impacts to species, habitats and ecological health, including from pollution (29)

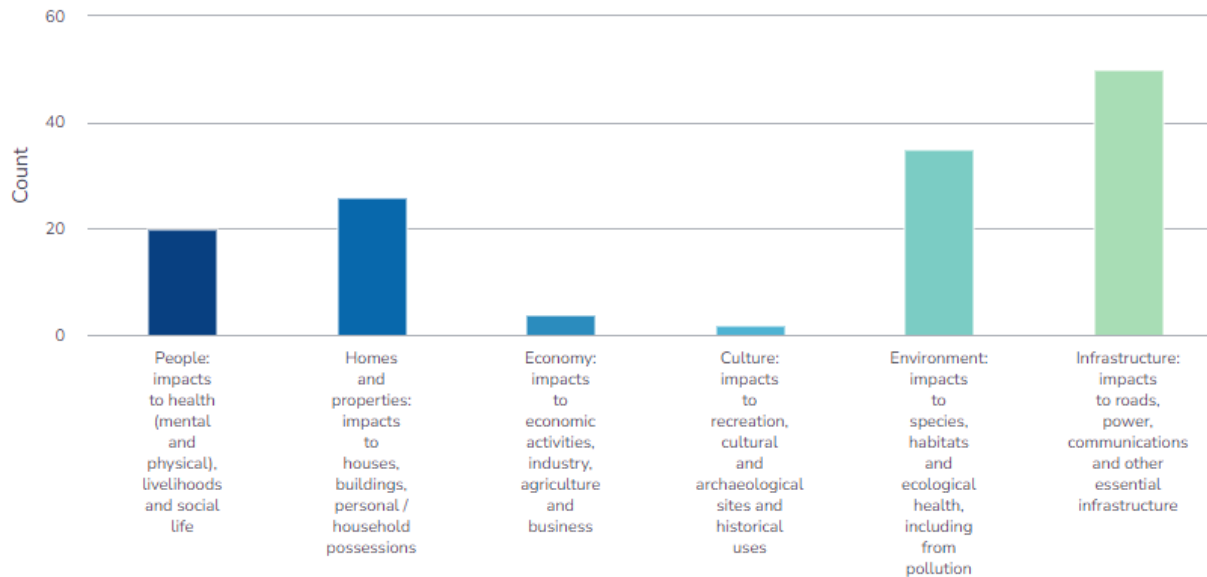
**Q12 If there are any other current flood impacts that you are particularly concerned about, please describe them here.**

- Local ecology (4)
- Infrastructure and roads (3)
- Existing flood infrastructure and need for maintenance (3)
- Housing and development (2)
- Emergency response (1)
- Vulnerable communities (1)
- Frustration with the City (1)



- Difficult to prioritize impacts as they all influence each other (1)
- No impacts (1)

**Q13 Given the range of impacts predicted to occur in Courtenay due to flooding, which of these impacts are you most concerned about in the future? Choose up to two (2).**



*Figure 7. Flood impacts that participants are most concerned about in the future (N=69).*

- Infrastructure: impacts to roads, power, communications and other essential infrastructure (50 votes)
- Environment: impacts to species, habitats and ecological health, including from pollution (35)
- Homes and properties: impacts to houses, buildings, personal / household possessions (26)

**Q14 If there are any other future flood impacts that you are particularly concerned about, please describe them here.**

- Impacts to K'ómoks First Nation and their reserve land (1)
- Salmon (1)
- Housing, development, and habitat (2)
- Flood impacts - broad (3)

- Flood impacts – local (2)
- Critical infrastructure and impacts to economy and public safety (5)
- All of the above (2)

**Q15 When you imagine the coastal and riverine areas in this region one or two generations into the future (e.g. 20-50 years from now), what is one thing...**

...we must preserve or maintain for the benefit of future generations?	...we must restore or improve for the benefit of future generations?	...we could lose or let go of, that would be of less consequence to future generations?
<ul style="list-style-type: none"> <li>• Environment (21)               <ul style="list-style-type: none"> <li>○ Environment and natural areas (8)</li> <li>○ Importance of the estuary (7)</li> <li>○ Habitat and water for fish (4)</li> <li>○ Nature-based solutions (2)</li> </ul> </li> <li>• Critical infrastructure and assets (i.e. transportation, utilities, food, drinking water) (8)</li> <li>• Public access to the coast and rivers (4)</li> <li>• K'ómoks First Nation and Indigenous heritage (3)</li> <li>• Governance (1)</li> <li>• Economy (1)</li> </ul>	<ul style="list-style-type: none"> <li>• Environment (24)               <ul style="list-style-type: none"> <li>○ Protecting ecology and habitat (18)</li> <li>○ Natural floodplain / estuary (6)</li> </ul> </li> <li>• Qualities (how we adapt and work together) (5)</li> <li>• Public access (4)</li> <li>• Stormwater and flood infrastructure (4)</li> <li>• Other infrastructure (2)</li> <li>• K'ómoks First Nation and Indigenous heritage (1)</li> </ul>	<ul style="list-style-type: none"> <li>• Developing in the floodplain (14)</li> <li>• Land uses that aren't aligned with the future (11)</li> <li>• Governance challenges (3)</li> <li>• Broader systems (1)</li> <li>• Misc (4)</li> </ul>

### 3. Public Survey 2: Proposed Flood Mitigation Options

#### 3.1 Introduction

##### Q1 Which community do you currently reside in?

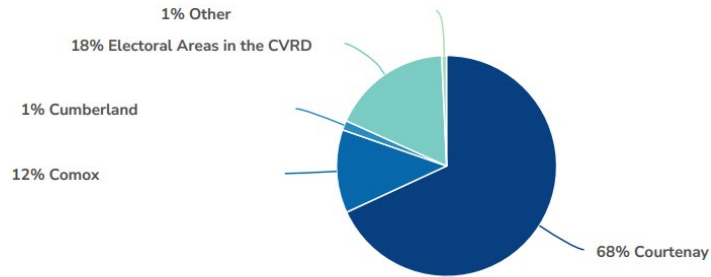


Figure 1. Participants' community of residence (N=148).

- Most respondents live in Courtenay (68%, 101 votes, 10 partial), followed by the electoral areas in the CVRD (32%, 47 votes, 26 partial)

##### Q2 Do you live in a floodplain?

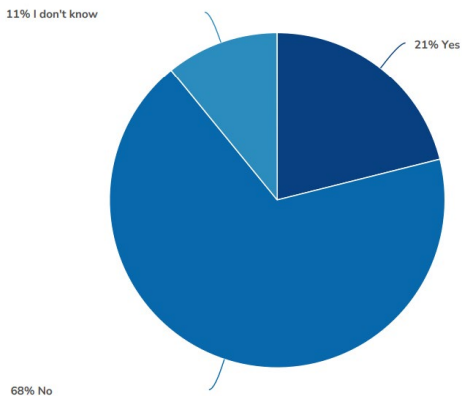


Figure 2. Percentage of participants living in a floodplain (N=147).

- Most responded No (68%, 100 votes, 54 partial), but 21% responded Yes (31 votes, 20 partial).

### Q3 What is your existing knowledge about the City of Courtenay’s Flood Management Plan? (check all that apply)

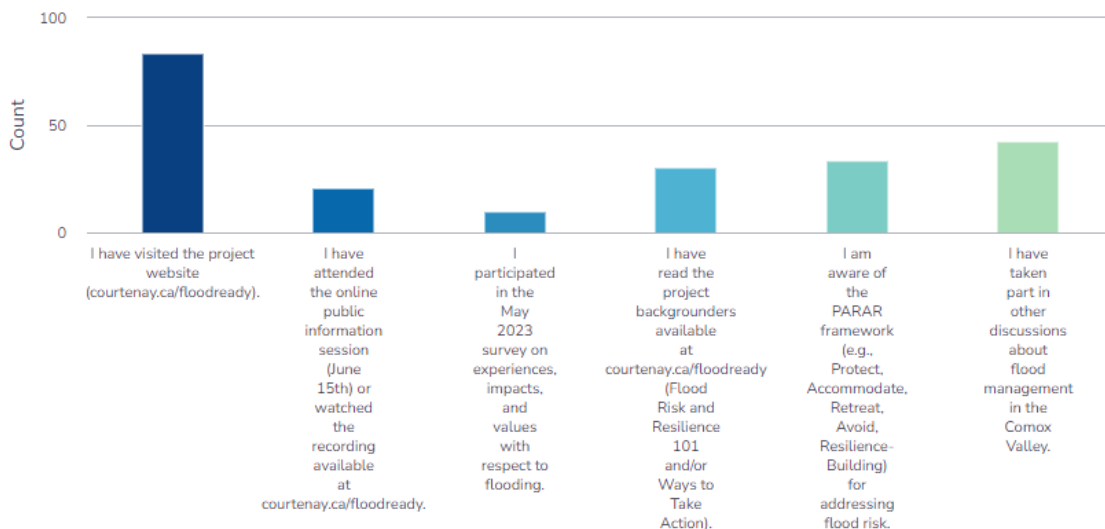


Figure 3. Participants’ existing knowledge about the City of Courtenay’s Flood Management Plan (N=117).

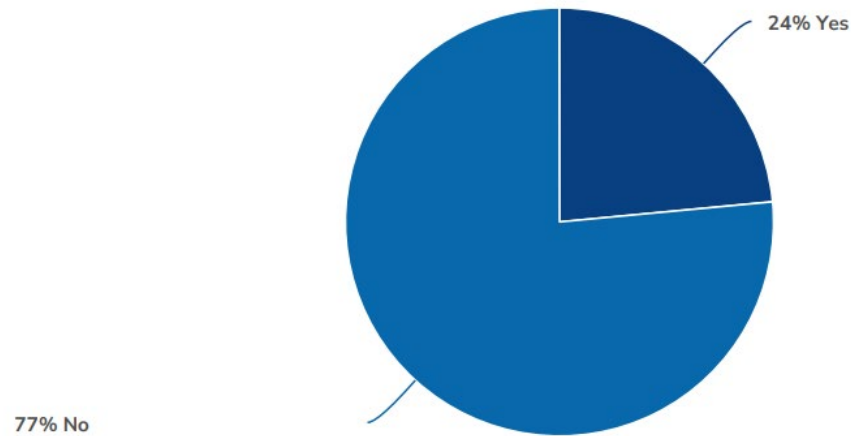
- Most survey respondents have visited the project website (72%, 84 votes, 48 partial).
- Some respondents have participated in other flood management conversations in the Comox Valley (37%, 43 votes, 19 partial) or are aware of the PARAR framework (29%, 34 votes, 12 partial).

### Q4 The Flood Management Plan is guided by community values and priorities identified through Courtenay’s Official Community Plan, the Coastal Flood Adaptation Strategy completed by the Comox Valley Regional District, and survey #1. From these efforts, the following local values were identified:

- Biodiversity (habitat, stewardship, caring for lands and waters)
- Recreation and Natural Assets (access to nature, beauty)
- Community & Culture (strong neighbourhoods, community involvement; art, heritage; Indigenous culture)
- Reconciliation (recognition of past and present harms, respectful relationship building with K’ómoks First Nation and other Indigenous peoples who live on these unceded lands)
- Social Equity (housing choices for all, consider equity in planning and design, diversity)
- Economic Success (viewed holistically through environmental, social and economic systems)

- Low carbon (net zero emissions by 2050)

**Are there any values that are important to you (in relation to flood risk) that are not reflected in this list?**



*Figure 4. Percentage of participants with values that are important to them that are not reflected in the above list. (N=119).*

- Most responded No (77%, 91 votes, 53 partial), feeling that their values are reflected in the list
- 24% responded Yes (28 votes, 10 partial)

**Q5 If you answered Yes to Question 4, please describe.**

- Public and community safety (10)
- Cost (4)
- Other (1 vote each) (14)

### 3.2 Proposed Citywide Options

**Q6 On a scale of 1 to 5, how well do you feel the suite of proposed citywide options meets the priorities and values of the community?**

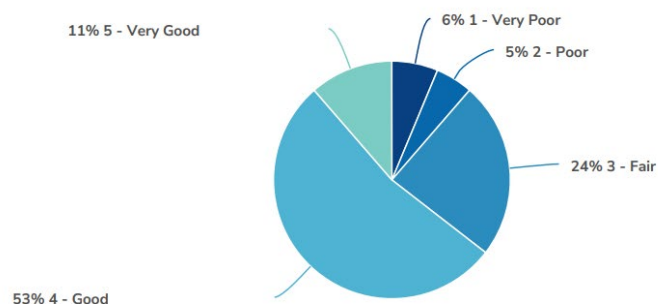


Figure 5. How well participants feel the suite of proposed citywide options meets the priorities and values of the community (N=79).

- Most responded Good (53%, 42 votes, 13 partial), with 24% responding Fair (19 votes, 5 partial)

**Q7 Which of the proposed citywide options do you think works particularly well or not well? You do not need to provide a response to every one of the options listed below -- please respond to as many or as few as you choose. There is space for brief additional comments to explain your preferences, as needed.**

	Indicate your preference			Considerations / Suggested Adjustments
	Works well	Does not work well	Needs adjustments	
a. Update Flood Construction Levels (FCLs) so new and renovated structures are built at a higher elevation, accounting for climate change. (short-term)	69.7% *53 votes, 13 partial	10.5% *8 votes, 1 partial	19.7% *15 votes, 6 partial	Accommodation for existing structures (6) Need to adjust as sea levels rise (2) Risk transfer towards Anderton Ave Enforce with a bylaw and by Council Dredge the Tsolum River so there is more room for water

	Indicate your preference			Considerations / Suggested Adjustments
	Works well	Does not work well	Needs adjustments	
				Questioning climate change (3) Lack of clarity on options (3)
b. Encourage design and retrofits of new and existing buildings to reduce damages associated with a flood event. (short-term)	70.3% *52 votes, 15 partial	10.8% (8 votes)	18.9% *14 votes, 4 partial	Need for incentives (7) Distribution of costs and liability, including declines in economic value of land when it is no longer insurable and wanting to avoid extra costs to tax payers (3) Wording of option (2) – “encourage is too soft, require is better” Communicating risk (2) Frustration with option (1) Erosion (1) Prefer managed retreat (1) Many homes are on stilts already, which works well
c. Restrict future land uses to those that are compatible with the flood risk and can accommodate periodic flooding with minimal to no damage. (short-term)	82.2% *60 votes, 16 partial	6.8% *5 votes, 2 partial	11% *8 votes, 2 partial	Support for option (5) – “better and cheaper than trying to save people or property from flood prone area”, compatible land uses only Needs clarification (3) We need some protection, not only avoid and retreat (1) Frustration and confusion (2) It’s at the landowner’s own risk not City (1)
d. Flood-proof critical infrastructure. (short-term)	66.2% *49 votes, 14 partial	14.9% (11 votes, 1 partial)	18.9% *14 votes, 5 partial	Relocate critical infrastructure out of floodplain, then floodproof what can’t be moved (5) Support for option (4)

	Indicate your preference			Considerations / Suggested Adjustments
	Works well	Does not work well	Needs adjustments	
				Frustration (2)
e. Provide education to reduce impacts from contamination sources, and encourage flood-resilient hazardous material storage. (short-term)	60.9% *42 votes, 13 partial	14.5% *10 votes, 2 partial	24.6% *17 votes, 4 partial	Support for option (4) – needs a full education program, start education early and use accessible language Make this mandatory, rather than encourage (4) Education is okay, regulations on hazardous materials important too (3) Difficult to implement, as some will listen and most won't Frustration (2)
f. Design parks, including landscaping and trails, to accommodate flooding and prevent erosion. (short-term)	92.9% *65 votes, 17 partial	5.7% *4 votes, 1 partial	1.4% *1 vote	Support for option (2) – “Feel this is the best short term solution and creates benefit to community and not just individual building.” Preventing contamination in riparian areas and water quality is important This might work in the future, but parks flood already. Do they need to be fixed? Frustration (4)
g. Develop maintenance plans for the inspection and recovery of roadways, parks and critical infrastructure after flooding. (short-term)	75.8% *50 votes, 13 partial	6.1% *4 votes	18.2% *12 votes, 4 partial	Involve everyone from the beginning Need crisis communications strategy Deal with contaminated water Engage parents who drive their kids to school, using roadways at risk from flooding Lack of support for option (2) Road infrastructure breaking treaty (1) – “Dyke road already breaks treaty, it shouldn't be there. Not to mention the



	Indicate your preference			Considerations / Suggested Adjustments
	Works well	Does not work well	Needs adjustments	
				service vehicles eg. Snow Plough picks up their shovel at KFN boundaries, leaving their roads unserved.”
h. Notify residents and businesses who are located within the floodplain, and encourage resilience-building among the community through education and emergency preparedness. (short-term)	54.9% *39 votes, 11 partial	14.1% *10 votes, 3 partial	31% *22 votes, 2 partial	<p>Make this mandatory, rather than encouragement (4)</p> <p>Assumptions about intentions and existing knowledge amongst property owners, businesses, and landlords (3)</p> <p>Access to information (2)</p> <p>Education needed on alternatives to armouring (2)</p> <p>Costs and responsibilities of the city vs. region (2)</p> <p>Impacts to schools and children (2)</p> <p>Lack of confidence in City on follow through (1)</p> <p>No new development in floodplain area (1)</p>
i. Engage in long-term planning to relocate residents and commercial uses out of high flood hazard areas as the opportunity arises. (long-term)	47.8% * 33 votes, 8 partial	26.1% *18 votes, 6 partial	26.1% *18 votes, 4 partial	<p>Distribution of costs and burden (4) – “with whose tax payers money?”, “where do you expect people to go?”</p> <p>People at risk need to be involved in decision-making now (3) – people need plans now to be able to prepare for the future</p> <p>This option is difficult to implement</p> <p>Important to use right tools to achieve goals (3), including using protect tools</p> <p>Strategies to avoid and restore could allow river to return to natural state</p> <p>Affordable housing needed, especially along for people in apartments along the river</p> <p>If h is implemented, then residents can decide about i.</p>

	Indicate your preference			Considerations / Suggested Adjustments
	Works well	Does not work well	Needs adjustments	
j. Work with K'ómoks First Nation to minimize impacts to archaeological sites. (long-term)	75.8% *41 votes, 10 partial	6.1% *10 votes, 2 partial	18.2% *15 votes, 5 partial	Make this an immediate focus Work closely with KFN – consultation is important Apply existing policies and tools (DRIPA, KFN Cultural Heritage Policy)

**Q8 What suggestions do you have to improve the draft suite of proposed citywide options? (please indicate the option name or letter when offering specific feedback.) (28 comments)**

- Retreat is acceptable if it includes restoration of natural areas
- Retreat should be a thoughtful process and we should protect areas of community importance as well
- Retreat will take time
- Other suggested flood protection ideas including building a seawall and a dam at Cruikshank River and noted that the Canterbury Dike is a retaining wall
- Suggestions to implement a regional flood management strategy and conduct thorough assessments
- Important to accept some losses as we plan for flooding
- Emergency preparedness includes plans for roadway resilience and evacuation routes and safety of school children in a flood
- Freeze future development in the flood zone until a more formal plan is put in place
- Logging has directly impacted flood risk in this part of Vancouver Island
- Questions about how to fund the options

**Are there any other specific impacts or considerations in [each LA] that we should be aware of when planning for flood risk?**

LA1	<ul style="list-style-type: none"> <li>• New development in the area at the CVEX grounds adds to flood danger</li> <li>• How will the sewer system respond to flooding? Is there a pumping plan?</li> <li>• Make room for the river to flow and dechannelize</li> <li>• Consider impacts to people with disabilities, seniors, and K'ómoks First Nation, especially in emergency response</li> <li>• This area also has residential areas on wells and their own septic systems</li> </ul>
LA2	<ul style="list-style-type: none"> <li>• Need for bank stabilization and to address erosion</li> <li>• Bridge safety and other critical infrastructure in the area needs to be considered</li> <li>• Container homes at Maple Pool and Puntledge RV, city-run day care at Lewis Park and The Link, and the Puntledge Elementary School are all at risk in this area</li> <li>• Impacts to Indigenous artifacts during construction of flood protection</li> </ul>
LA3	<ul style="list-style-type: none"> <li>• Trees and other debris pile up, creating dams in the river, which can exacerbate flooding</li> <li>• Safety of homeless people camping along the river</li> <li>• Transportation risks for people heading to and from Campbell River and Mt. Washington</li> <li>• "There is a First Nations reserve across the river which also needs protection even though it is not in the City"</li> </ul>
LA4	<ul style="list-style-type: none"> <li>• This area and the next one need to be considered together because they impact each other</li> <li>• There are now multi-unit buildings in this area, increasing vulnerability</li> <li>• Flooding has blocked all roadways to cross the river before</li> <li>• Need more considerations for people with disabilities and seniors</li> <li>• Areas that have flooded in the past include: Comox Rd, 19A by the farm, Superstore parking lot, Ryan Road &amp; 19A through the drain hole.</li> </ul>

LA5	<ul style="list-style-type: none"> <li>• Need for emergency response disaster route to be implemented to help emergency vehicles get to and from hospital and across bridges</li> <li>• Parents drive their kids all over the region to go to school</li> <li>• Having a “straight” channelized river doesn’t allow for the river to “breathe”</li> <li>• New housing and businesses are being built between Cliffe Ave and Courtenay River. Why is this happening with the flood risk?</li> <li>• Will Kus-kus-sum survive the floods?</li> </ul>
LA6	<ul style="list-style-type: none"> <li>• Restore natural assets in this area, including daylighting little waterway beside 19th St.</li> <li>• Airpark is important for disaster response</li> <li>• Concerns about building along this strip due to risk and loss of natural environment</li> </ul>

### 3.3 Local Area 1: Tsolum River

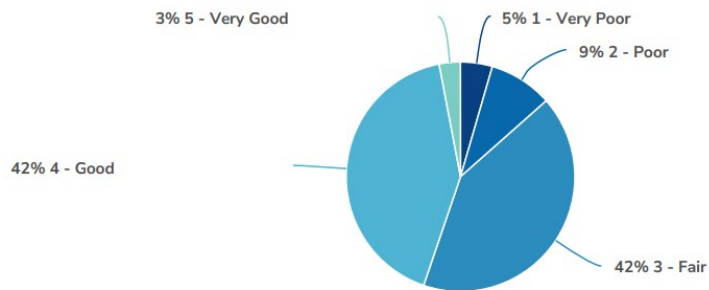
#### Impacts

**Q9 Which impacts are you most concerned about for this area during a flood event?**

- People (44 votes, 6 partial)
- Homes and properties (44 votes, 7 partial)
- Environment (45 votes, 4 partial)
- Infrastructure (45 votes, 8 partial)

#### Proposed Options

**Q11 On a scale of 1 to 5, how well do you feel the suite of proposed options meets the priorities and values of the community?**



*Figure 6. How well participants feel the suite of proposed options meets the priorities and values of the community for Local Area 1 (N=67).*

- Most responded Good (42%, 28 votes, 5 partial), or Fair (42%, 28 votes, 4 partial), with 9% responding Poor (6 votes, 1 partial)

**Q12 Which of the specific proposed options for this local area do you think works particularly well or not well for this area?**

	Indicate your preference			Considerations / Suggested Adjustments
	Works well	Does not work well	Needs adjustments	
Encourage temporary flood barriers at a property level. (short-term)	45.2% (28 votes, 4 partial)	29% (18 votes, 2 partial)	25.8% (16 votes, 3 partial)	Wording needs to be more than encouragement Maple Pool area needs a specific plan or focused engagement Needs to be more than sandbags Affordability for low-income people Option may be ineffective Questions on why this is temporary
Work with the agriculture industry and producers to explore mutually beneficial arrangements to accommodate occasional flooding. (long-term)	61% (36 votes, 5 partial)	15.3% (9 votes, 2 partial)	23.7% (14 votes, 1 partial)	Support but needs an overall strategy for contamination management Not just focus on agriculture in this area Erosion and farming has contributed to the flooding problem Need better riparian standards to reduce contamination of water

**Q13 What suggestions do you have to improve the draft suite of proposed options in this local area?**

- City involvement in flood management is important – “the rich and poor alike deserve a safe place to live”
- Flooding should be accommodated as it’s good for the soil and some areas could absorb the water
- Communicate risks with residents
- Need for riparian set backs
- Relocate residents out of the floodplain
- Dredge the river and take out the silt that has washed out the river

### 3.4 Local Area 2: Puntledge River

#### Impacts

##### Q14 Which impacts are you most concerned about for this area during a flood event?

- Homes and properties (42 votes, 6 partial)
- Environment (41 votes, 3 partial)
- Infrastructure (38 votes, 5 partial)

#### Proposed Options

##### Q16 On a scale of 1 to 5, how well do you feel the suite of proposed options meets the priorities and values of the community?

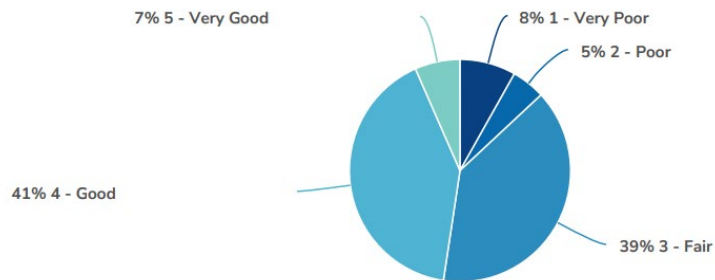


Figure 7. How well participants feel the suite of proposed options meets the priorities and values of the community for Local Area 2 (N=61).

- Most responded Good (41%, 25 votes, 3 partial), with 40% responding Fair (24 votes, 3 partial) and 8% responding Very Poor (5 votes)

##### Q17 What suggestions do you have to improve the draft suite of proposed options in this local area? (9 comments)

- Conduct a comprehensive flood risk assessment and collaborate with dam operators and relevant authorities
- Build a seawall
- Allow for greater flood storage capacity upstream
- Impacts to schools and families, especially at Puntledge Elementary
- Engagement with parents is critical on getting prepared and alternative routes home during a flood event
- Bank stabilization is an issue here

- Unclear why there aren't specific options for this area
- Could Comox Valley consider expanding reservoir capacity during spring flooding for water reserves in summer months?
- Important to accommodate flooding

### 3.5 Local Area 3: Condensory Bridge & Anderton Avenue

#### Impacts

#### Q18 Which impacts are you most concerned about for this area during a flood event?

- People (38 votes, 3 partial)
- Homes and properties (45 votes, 4 partial)
- Environment (39 votes, 2 partial)
- Infrastructure (44 votes, 3 partial)

#### Proposed Options

#### Q20 On a scale of 1 to 5, how well do you feel the suite of proposed options meets the priorities and values of the community?

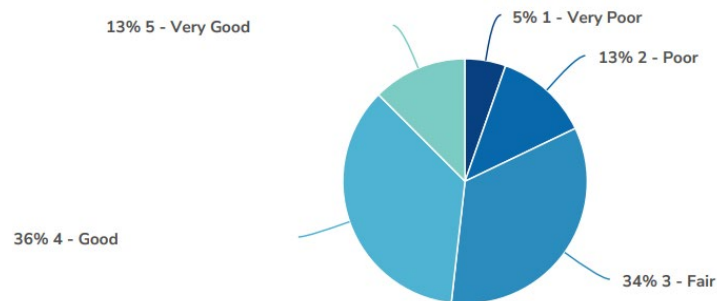


Figure 8. How well participants feel the suite of proposed options meets the priorities and values of the community for Local Area 3 (N=56).

- Most responded Good (36%, 20 votes, 2 partial), with 34% responding Fair (19 votes) and 13% responding Poor (7 votes)



**Q21 Which of the specific proposed options for this local area do you think works particularly well or not well for this area?**

	Indicate your preference			Considerations / Suggested Adjustments
	Works well	Does not work well	Needs adjustments	
Replace the Anderton Dike with a naturalized foreshore along Anderton Ave for erosion control. (long-term)	76.5% (39 votes, 3 partial)	11.8% (6 votes)	11.8% (6 votes)	Too expensive? "Naturalized foreshore is great" Consider public access along the river "High risk area" Need alternate route for bridge users
Install temporary flood protection at Condensory and Canterbury. (long-term)	50% (25 votes, 2 partial)	22% (11 votes)	28% (14 votes, 1 partial)	Will block evacuation route How can temporary work for long-term? What does this entail? Sandbags? Make property owners pay Relocate or raise these properties

**Q22 What suggestions do you have to improve the draft suite of proposed options in this local area?**

- Better riparian standards are needed
- "Prevent and clean up flotsam that gets caught and builds up in the river during flooding"
- Confusion about temporary flood measures (not well-described in the survey). How can they be both temporary and long-term?
- Public safety is important
- Is the current bridge infrastructure safe or does it need to be enhanced for evacuation routes?

**3.6 Local Area 4: Lewis Park & Puntledge Road**

**Impacts**

**Q23 Which impacts are you most concerned about for this area during a flood event?**

- People (33 votes, 3 partial)
- Economy (33 votes, 3 partial)
- Environment (39 votes, 2 partial)

- Infrastructure (46 votes, 2 partial)

**Proposed Options**

**Q25 On a scale of 1 to 5, how well do you feel the suite of proposed options meets the priorities and values of the community?**

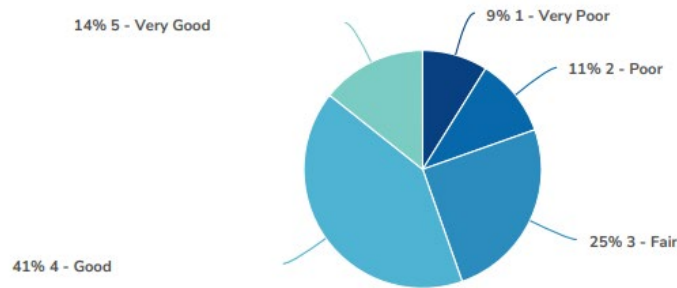


Figure 9. How well participants feel the suite of proposed options meets the priorities and values of the community for Local Area 4 (N=56).

- Most responded Good (41%, 23 votes, 1 partial), with 25% responding Fair (14 votes, 1 partial) and 14% responding Very Good (8 votes)

**Q26 Which of the specific proposed options for this local area do you think works particularly well or not well for this area?**

	Indicate your preference			Considerations / Suggested Adjustments
	Works well	Does not work well	Needs adjustments	
Replace the aqua dam and tall wall with a pre-installed temporary barrier along Tsolum Slough. (short-term)	51.1% (24 votes, 1 partial)	21.3% (10 votes)	27.7% (13 votes)	What happens after temporary option? Needs more detail for public access for people with disabilities and accessibility Waste of tax payer dollars Need specifics of barrier design and environmental impact
Flood-proof Lewis Centre, the LINC Youth Centre and sanitary lift stations	62.7%	19.6% (10 votes)	17.6% (9 votes)	Unclear if this can work Don't invest more money into the Lewis Centre

	Indicate your preference			Considerations / Suggested Adjustments
	Works well	Does not work well	Needs adjustments	
(Puntledge and CVRD Regional). (short-term))	(32 votes, 1 partial)			City facilities should be relocated outside of the floodplain as well as the day care Depending on costs
Work with the agriculture industry and producers to explore mutually beneficial arrangements to accommodate occasional flooding. (long-term)	64.6% (31 votes, 1 partial)	16.7% (8 votes)	18.8% (9 votes)	Farmer education is important Road should be prioritized rather than agriculture Wasting tax payer dollars Flooding on roads next to agricultural land occurs already
Design an overflow channel and erosion control at Lewis Park. (long-term)	62.7% (32 votes, 1 partial)	19.6% (10 votes)	17.6% (9 votes)	Channel should go to the slough not just the farms Would need to see specific designs Should be a short-term goal Design with wetlands not hard structure for erosion control
Work with partners to redesign (elevate) Highway 19A to maintain critical transportation and evacuation route for residents. (long-term)	68.6% (35 votes, 1 partial)	15.7% (8 votes, 1 partial)	15.7% (8 votes)	Costly option How would floodwater pass through (under/over)? Unclear what is being proposed Widen the road in addition to elevating Should be a short-term goal Action on this option is urgent Engage with families using roadway to drop off children
Relocate city owned recreation facilities out of the high flood hazard areas. (long-term)	56% (28 votes, 1 partial)	28% (14 votes, 1 partial)	16% (8 votes)	Depends which facilities and where they are relocated to Expensive option, live with the facility in the flood zone and protect it Rec centre at Lewis Park is part of Courtenay's legacy Cozy corner day care needs to be urgently moved

**Q27 What suggestions do you have to improve the draft suite of proposed options in this local area? (10 comments)**

- No mention of moving industrial businesses out of this area. They should not be located along the river
- “Build upon and expand the work of Kus-kus-sum in this area.”
- “The redesign and elevation of 19A should not be a "long term" goal, but asap.”
- What is the cost to raise the highway and is this cost even reasonable?
- Emergency response needs to be included throughout these options
- Frustration with lack of research done for survey

**3.7 Local Area 5: Courtenay River**

**Impacts**

**Q28 Which impacts are you most concerned about for this area during a flood event? People (34 votes, 2 partial)**

- Homes and properties (38 votes, 3 partial)
- Environment (40 votes, 2 partial)
- Infrastructure (40 votes, 2 partial)

**Proposed Options**

**Q30 On a scale of 1 to 5, how well do you feel the suite of proposed options meets the priorities and values of the community?**

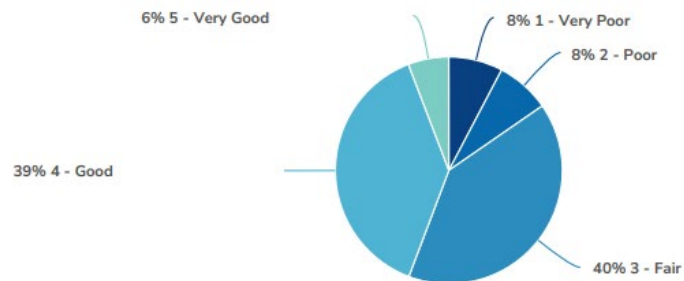


Figure 10. How well participants feel the suite of proposed options meets the priorities and values of the community for Local Area 5 (N=52).

- Most responded Good (40%, 20 votes, 1 partial), with 39% responding Fair (21 votes)

**Q31 What suggestions do you have to improve the draft suite of proposed options in this local area? (9 comments)**

- Incorporate tidal influences into planning
- Need for more setbacks from the river for multi-family residential buildings
- Expand bylaws so that City can address non-compliance building
- “Purchase the old night club that is currently rotting on the river banks, along with the hostel just upstream of the 5<sup>th</sup> Street bridge. Demolish these buildings and slope back the river banks to create healthy riparian and aquatic vegetated areas. Work with Home Hardware to find a way to get them off the river banks as well, and reclaim the land similar to Kus-kus-sum.”

**3.8 Local Area 6: Airpark and South Courtenay**

**Impacts**

**Q32 Which impacts are you most concerned about for this area during a flood event?**

- Homes and properties (40 votes, 2 partial)
- Environment (45 votes, 2 partial)
- Infrastructure (39 votes, 1 partial)

**Proposed Options**

**Q34 On a scale of 1 to 5, how well do you feel the suite of proposed options meets the priorities and values of the community?**

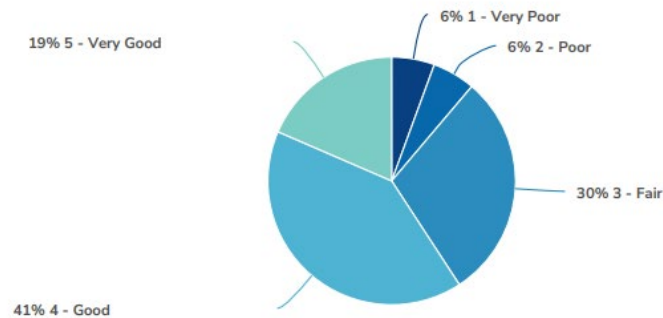


Figure 11. How well participants feel the suite of proposed options meets the priorities and values of the community for Local Area 6 (N=54).

- Most responded Good (401%, 22 votes), with 30% responding Fair (16 votes) and 19% responding Very Good (10 votes)

**Q35 Which of the specific proposed options for this local area do you think works particularly well or not well for this area?**

	Indicate your preference			Considerations / Suggested Adjustments
	Works well	Does not work well	Needs adjustments	
Flood-proof sanitary lift stations. (short-term)	70% (35 votes, 1 partial)	12% (6 votes)	18% (9 votes)	Include flood proofing of the airpark More lift stations should be included with the south sewer expansion This will help prevent pollution in estuary While this helps with immediate critical infrastructure concerns, concerns about addressing flood management in the long term
Restore the coastal shoreline, and intertidal zones to minimize erosion. (long-term)	66.7% (32 votes)	14.6% (7 votes, 1 partial)	18.8% (9 votes)	Unclear what this option entails This area does not need more work Urgent action on contaminated waters Love this idea Education for homeowners also needed Will be complex and requires coordination

**Q36 What suggestions do you have to improve the draft suite of proposed options in this local area? (5 comments)**

- Good objectives for this area
- People use this area for birdwatching and nature experiences. Shoreline restoration would enhance this
- Freeze new development here immediately
- Look at relocating buildings and residents and businesses

**Q37 Is there anything else you'd like to share? (17 comments)**

- Not enough people are aware of the risks to flooding
- Implement early warning systems to provide timely alerts
- Work with BC Hydro on this plan

- Flooding in the valley has seriously impacting families with children and youth attending schools over the years. Make this more of a focus!
- Costs need to be kept low for taxpayers
- Generally good work
- No new development in flood prone areas
- Think of flooding and drought conditions together
- Gratitude for the survey
- “This was a very long survey”