

City of Courtenay - Flood Management Plan Recommendations Overview

City-wide Recommendations



Avoid

- Develop flood risk-based zoning bylaw.
- Avoid new residential development in the floodway.
- Recommended floodway land uses include: agricultural, recreational, and parks.
- New development in the flood fringe must accommodate flood waters.
- Over the long term, opportunistically acquire land in the floodway.

Retreat

Develop a managed retreat strategy to convert residential land uses in the floodway to land uses that are compatible with the flood risk.



Protect

- Clarify Provincial expectations for vegetation management on dikes that only offer erosion protection.
- Manage vegetation along all dikes in accordance with Provincial expectations.
- Complete annual inspections for all dikes, as required by the Dike Maintenance Act.

Resilience-Building

- Develop a comprehensive Communications Campaign to educate the public, residents of the floodplain, and property owners in high risk areas about flood risk, and actions to reduce the risk.
- Update monitoring and warning procedures.
- Update emergency response plan.
- Develop flood recovery and post-disaster plans.
- Work with insurance companies to address residual risk.
- Collaborate regionally on emergency preparedness and response.

Accommodate

- Update floodplain bylaw (new flood construction levels & erosion setbacks).
- Consider Development Area Permit for flood and erosion hazards.
- Encourage property-level flood barriers to reduce damages to properties in the floodplain.
- Use temporary flood barriers as an emergency response measure.
- Floodproof City-owned facilities and infrastructure (including lift stations).
- Develop tools to track all flood related covenants registered on property titles. Inform property owners of the covenant requirements and seek enforcement.
- Work with residents, business owners, the Airpark, agricultural producers, and City Operations to minimize contamination sources (septic systems, hazardous material storage).
- Consider regulation of hazardous material storage in floodplain.
- Improve the resiliency of park infrastructure to flooding (through Park Master Plans).
- Work together with K'ómoks First Nation to identify solutions for Indigenous sites at risk that are supported by their community.

Local Area Recommendations

Condensory & Canterbury:

- Resolve the ownership dispute associated with Canterbury Dike by working with the Province and the strata.
- Ensure inspections of Canterbury Dike are conducted, and any required repairs are made.

Anderton Avenue:

- Conduct additional inspections and monitoring needed to ensure public safety.
- Develop plans to remediate Anderton Dike, including removal of the wall and naturalization of the shore.

Puntledge Road Commercial Area:

- Ensure City-owned buildings and infrastructure, including the Lewis Recreation Centre, LINC Youth Centre, Memorial Outdoor Pool, and outbuildings are floodproof and resilient to flood damages.
- Complete repairs of Lewis Park Dike, and consider naturalizing the shore over the long-term.
- Floodproof Puntledge Road lift station.
- Develop a detailed evacuation plan for the area, with a focus on traffic management, signage, and public education.
- Maintain TideFlex valves in the area, and consider the installation of additional TideFlex valves.
- Update, repair, and maintain culverts along the Rye Road Flood corridor, and in Lewis Park.
- Remove tall wall, and replace with a traffic barrier, if required.
- Change Tiger Dam from seasonal deployment in current location to targeted critical infrastructure protection on an event-basis.
- Work with the Ministry of Transportation and Infrastructure on Highway 19A upgrades.

City of Courtenay Flood Management Plan Floodway / Flood Fringe Map Legend Floodway (present-day - likely event) Flood Fringe (mid-term future - less l plus freeboard) ☐ Regulatory Flood Extents K'ómoks First Nation Reserve Lands

Floodway: The river channel and shoreline and adjacent areas, where water depths, veolocities and wave action are greatest and most hazardous.

Flood Fringe: The remaining areas of the floodplain that are outside the floodway. Floods less likely with less depth and velocity/wave action.

Agricultural Area:

- Communicate flood risk and resources to reduce risk to local agricultural producers as part of communications campaign. Align with the CVRD Comox Valley Agricultural Plan information.
- Encourage minimizing agricultural contamination sources.

Kus-kus-sum Site:

 Continue restoration and naturalization at Kus-kus-sum site.

Coastal Area:

- Restrict new development in coastal erosion setback.
- Continue working with Airpark to avoid potential contamination sources.
- Over the long-term, consider increasing erosion protection given sea level rise and associated coastal erosion, with a Green Shores approach.

