

SACKVILLE RIVERS



FLOOD MITIGATION OPTIONS PER CBCL – SACKVILLE RIVERS FLOODPLAIN STUDY 2017

A Review by the Sackville
Rivers Association





CBCL LIMITED SACKVILLE RIVERS FLOODPLAIN STUDY

Recommendations:

- Prevent/reduce future development in flood prone areas by altering planning and zoning by-laws
- In future, use “*Best Management*” and “*Low Impact*” development practices
- Build Flood Protection Infrastructure

PREVENTING FUTURE DEVELOPMENT IN FLOOD PRONE AREAS BY PLANNING AND ZONING BY-LAWS

FLOODPLAIN ZONING

- Designate revised floodplain areas
- Implement zoning regulations that restrict development in these high-risk areas

COMPREHENSIVE PLANNING

- Integrate floodplain management into broader comprehensive planning efforts, considering not only flood risk but also environmental conservation

INSPECTION AND COMPLIANCE

- Ensure strict enforcement of zoning and building regulations
- Implement penalties for non-compliance with floodplain regulations

BEST MANAGEMENT PRACTICES AND LOW IMPACT DEVELOPMENT

KEEP IT NATURAL!

Keep proposed building site as undisturbed as possible:

- Retain as much vegetation and elevation as possible
- Build parking garages and/or underground parking to eliminate large hard surface parking lots that contribute to increased sedimentation

ENFORCEMENT

- Ensure strict enforcement of zoning and building regulations
- Implement penalties for non-compliance with floodplain regulations

EDUCATION

- Through education, raise awareness among the community about the importance of stormwater runoff and encourage responsible practices

FLOOD PROTECTION INFRASTRUCTURE

INCREASING CHANNEL CAPACITY AND BERMS

Channeling a river:

- *Destroys habitat*
- *Increases water velocity*
- *Increases erosion*

Building Berms:

- *Temporary relief*
- *Increase potential impacts of the floods by altering flood patterns*
- *Berm Breach → Worsens flood effects*

PURCHASING PROPERTIES

Whenever commercial and residential properties are removed from the floodplain it is a win for the environment.

Benefits include:

- Floodplain is returned to a more natural state allowing better mitigation of flooding
- Reduction of runoff
- Increased stormwater infiltration; reducing flooding

CULVERTS TO BRIDGES

Upgrading a culvert to a bridge:

- Improves fish habitat
- Facilitates fish passage
- Removes throttle point in river and can help improve flood flows