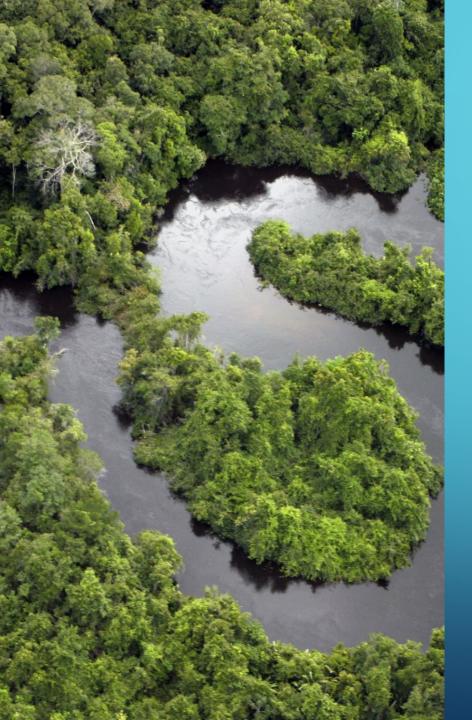


FLOOD MITIGATION OPTIONS
PER CBCL – SACKVILLE RIVERS
FLOODPLAIN STUDY 2017

A Review by the Sackville Rivers Association

Item 10.3.2



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