

PROTECTING RIPARIAN BUFFER ZONES

Supporting and enhancing natural riparian buffer zones is important for ecosystem conservation and water quality. Preserving and maintaining any riparian area on your farm is the first step to enhancing this natural system. Improving the health and biodiversity of a riparian area can include reducing grazing near bodies of water or incorporate rests periods in grazing areas, as well as planting trees and other natural species. Riparian buffer zones allow for greater benefits such as reducing erosion, increasing watershed storage, lowering the number of contaminants in bodies of water, and enhancing soil development.

Implementation Tips

- Protect or create riparian strips between cultivated areas and water environments along creeks, streams, gullies, rivers and wetlands. These areas provide wildlife habitat, streambank stability or a corridor for wildlife to pass through.
- Consider planting trees, wildflowers, grasses or other natural species. Maintain habitats for wildlife, such as rock piles for reptiles and standing dead trees for birds.
- Avoid removing vegetation to plant annual or forage crops.
- Plan for riparian buffer redesign if soil is being lost to the stream.
- Sign a conservation/stewardship agreement to set aside parts of your farm for wildlife habitat.



Benefits



Carbon sequestration



Increased resiliency to the effects of climate change



Improved soil health



Enhanced biodiversity



Estimated return on investment
Medium



On-farm emission mitigation potential +

Resources

- **Webpage:** Riparian Area Management, Government of Canada (dfc-plc.info/PRBZ1)
- **Webpage:** Riparian Buffer Zones, Teagasc (dfc-plc.info/PRBZ2)
- **Factsheet:** proAction Environment Resources, Dairy Farmers of Canada (dfc-plc.info/PRBZ3)
- **Research study:** Drever, C.R., Cook-Patton, S.C., Akhter, F., Badiou, P.H., Chmura, G.L., Davidson, S.J., Desjardins, R.L., Dyk, A., Fargione, J.E., Fellows, M., Filewod, B., Hessian-Lewis, M., Jayasundara, S., Keeton, W.S., Kroeger, T., Lark, T.J., Le, E., Leavitt, S.M., LeClerc, M.-E., Lemprière, T.C., Metsaranta, J., McConkey, B., Neilson, E., St-Laurent, G.P., Puric-Mladenovic, D., Rodrigue, S., Soolanayakanahally, R.Y., Spawn, S.A., Strack, M., Smyth, C., Thevathasan, N., Voicu, M., Williams, C.A., Woodbury, P.B., Worth, D.E., Xu, Z., Yeo, S., Kurz, W.A., 2021. Natural climate solutions for Canada. Science Advances 7, eabd6034. (dfc-plc.info/PRBZ4)