

Although there are a numerous regulations already in place to protect streams, wetlands, and water quality, it is important to understand the unique role that construction setbacks play—and how this role is not duplicated by other regulations.

## 6. 1. How does a building impact a river or stream?

Other than visual impacts, buildings typically impact a river or stream indirectly. It's not the building itself that creates the impact, but the site disturbances associated with its construction and maintenance, and the day-to-day activities associated with occupancy. Stream environments are fragile and easily damaged by excessive sedimentation, the introduction of manmade contaminants, the loss of native vegetation, and disruptions to wildlife habitat. Activities that can affect the stream environment include:

- Surface runoff of disturbed soils associated with site excavation and road building activities.
- Surface runoff of household chemicals, such as herbicides, pesticides, fertilizers, automotive lubricants, coolants, and fuels, etc.
- Discharge from overloaded or defective septic systems.
- Removal of natural streamside (riparian) vegetation to allow for manmade landscaping, such as lawns, parking areas and roadways. Manmade landscapes are typically not as effective as natural vegetation at filtering and stabilizing stream banks.
- Building along rivers and streams that lead to a cascading series of impacts, including installation of riprap or
  other stream bank armoring. Landowners use stream bank armoring to prevent rivers and streams from
  using their floodplains and/or having a stream channel change its course. While this may sound reasonable
  and harmless, the consequences for our streams can be serious. While a few barbs or a short stretch of
  riprap will not significantly impact a stream, ten barbs in a row can turn a river to hit the opposite bank, a
  long stretch of riprap can cause serious erosion downstream, and the combination of many projects can
  cause channelization.
- Development activity along streams impacts adjacent property owners (*see question #3.4 above*). The No Adverse Impact goal established by the Association of State Floodplain Managers strives to control flood and erosion losses and new development which increases flood risks and losses (see < <a href="http://www.floods.org/index.asp?menuID=349&firstlevelmenuID=187&siteID=1">http://www.floods.org/index.asp?menuID=349&firstlevelmenuID=187&siteID=1</a>>).

Setbacks provide a physical separation to moderate these manmade impacts, in effect, acting as a safety net between people and nature.<sup>7</sup>

## 6. 2. What are the advantages to a streamside property owner having stream setbacks?

With proper setbacks, a home is less likely to be endangered by flooding and lateral stream channel movement. Having healthy fish and wildlife habitat between a home and a stream is another advantage, as is increased aesthetic enjoyment. With proper setbacks, a landowner is less likely to be impacted by actions of other streamside owners. For rivers and streams that are fishable, privacy reasons argue for setbacks. There can be a measurable increase in property value within areas where (1) the actions of neighbors are predictable and (2) land use regulations protect natural amenities.<sup>8</sup>

## 6. 3. Why do we need another regulation? Don't other regulations (i.e. floodplain, septic, 310 permits, etc.) protect our streams and clean water?

Although there are several regulations protecting water quality, only stream setbacks require a vegetated buffer that reduces water pollution from human activities. This "service" is provided with minimal investment costs. Stream setbacks also provide many other benefits beyond water quality issues, including slowing flood waters, helping prevent unnatural erosion, providing wildlife habitat, and more. The primary purpose of stream setback provisions is to minimize the impacts of development in close proximity to environmentally sensitive areas adjacent to streams.

The basic differences between stream setbacks and other stream permits used in Montana are described in the publication, *Stream Setbacks versus Stream Permitting Programs in Montana - What are the Differences?*, available at <<u>www.mtaudubon.org</u>>. (Ellis, Janet H. 2008. Handout developed as part of an EPA/DEQ Wetland Development Grant. Montana Audubon, Helena, Montana, January 23, 2008. 5 pp.).

Stream Setback Fact Sheet Series prepared by Montana Audubon for the Montana Dept. of Environmental Quality. 2009. Access at <a href="https://www.mtaudubon.org">www.mtaudubon.org</a>. May be reprinted without permission.

<sup>&</sup>lt;sup>7</sup> Adapted from Madison County Streamside Protection: Frequently Asked Questions, Update August 27, 2008

<sup>&</sup>lt;sup>8</sup> Adapted from Ravalli County Streamside Setback Committee: Frequently Asked Questions on Draft Interim Streamside Setback Zoning Regulations, Approved 1/15/08