

Beaver Dam Analogues



OUTSIDE HELP

- Landscape Architect
- Environmental Consultant
- River Constructor
- Engineer

✓ Potential permits required: CWA 404, Threatened & Endangered Species, NHPA, Floodplain

Beaver Dam Analogues (BDAs) are man-made structures that can be built on secondary channels to encourage beaver populations in the area. Benefits of installing these analogues include:

- Controls sediment movement
- Creates wildlife habitat
- Controls secondary flows and erosion



Photo courtesy of : E-Science News [page 188]

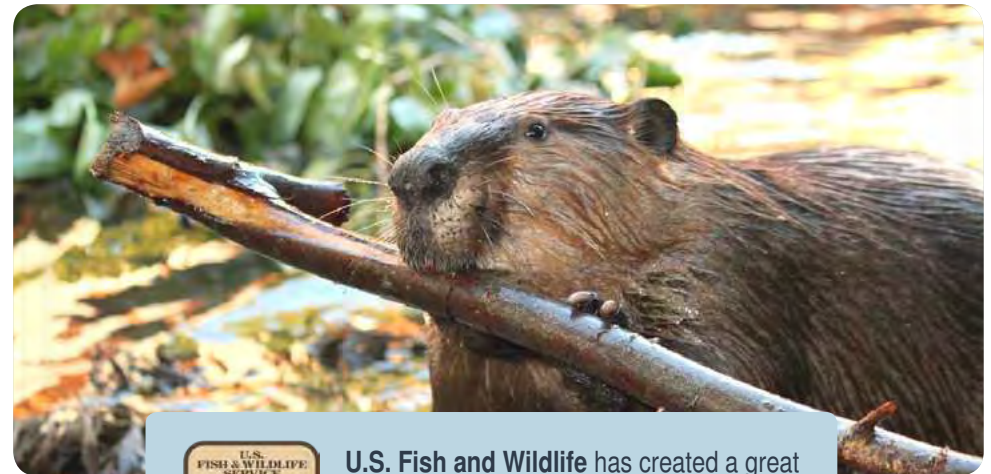
Although they can sometimes cause conflicts, beavers are an important species in many riparian ecosystems. When decided if/where a BDA would be appropriate on your property, it is important to recognize that beavers naturally chew down trees. By encouraging beaver populations, you will

be encouraging the removal of some trees in the area. In a well-balanced ecosystem, beavers chew down trees at a rate that still allows tree & plant communities to establish.

Beaver dam analogues should never be constructed on the main stream channel because they will block water flows. However, BDA's can be built on secondary channels to encourage nearby beavers to inhabit them and begin building a new home. These are also sometimes referred to as "Beaver Starter Kits". BDA's will change the natural flow in the secondary channel they are built on. As a result, they need to be properly engineered, permitted and constructed by professionals. Improper construction of a BDA can result in water backing up upstream of the BDA. Failure of the structure may cause negative downstream impacts as well.

Beaver dam analogues are fairly new to the stream restoration community and it will be helpful if you can work with outside consultants who have experience designing and building BDAs. Because BDAs are fairly new, someone who has gone through the permitting process for these structures on other projects will also be able to guide you through the permitting process more easily.

If beavers begin working on the BDA you should expect water to begin backing up behind the structure, creating a pool and new wetland habitat. Your discussions with the outside consultants should include making sure you have sufficient area that can be inundated. It is also important that you do not have structures in the area where pooling and wetlands will occur. BDAs have the potential to cause dramatic changes to your land and they are typically used on very large properties. Make sure to talk with environmental consultants and engineers about the effects a beaver dam could have on your property.



U.S. Fish and Wildlife has created a great resource for beaver habitat restoration & considerations:

www.fws.gov/oregonfwo/promo.cfm?id=177175812