

# Landowners' Guide to Nonlethal Beaver Solutions

*How to help beavers and benefit from them at the same time*



Animal Protection of New Mexico  
[www.apnm.org](http://www.apnm.org)

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*How to help beavers and benefit from them at the same time*

**B**eavers build dams where they hear running water, and these dams create ponds. This benefits the environment, but sometimes causes problems for humans, including tree cutting and flooding of structures, roads, and fields.

Scientific evidence shows that the benefits of beavers are numerous. Because of their activities, beavers provide water and habitat for humans and for a variety of wildlife, including fish, birds, and elk.

Their dams also filter stream water, improving water quality and decreasing silt accumulation. Dams keep water in an area longer, raising the water table, increasing water storage, repairing eroded riparian areas, and providing habitat for willows and cottonwoods.



Although the benefits of beavers are tremendous, some landowners find that their structures or roads become flooded, their culverts become blocked, or their cottonwoods or fruit trees are cut down. To mitigate these problems, Animal Protection of New Mexico (APNM) recommends that landowners adopt nonlethal solutions, such as wrapping trees and building flow devices. Flow devices create a “leak” in beaver dams and blocked culverts, allowing water to continue flowing downstream, protecting culverts from being dammed up completely, and allowing beavers to remain.

To ensure an effective and successful flow device, APNM recommends that landowners first seek assistance from a contractor (see page 6 for a list of available contractors). There are many details to consider regarding various situations and locations that only someone trained in building flow devices would know.

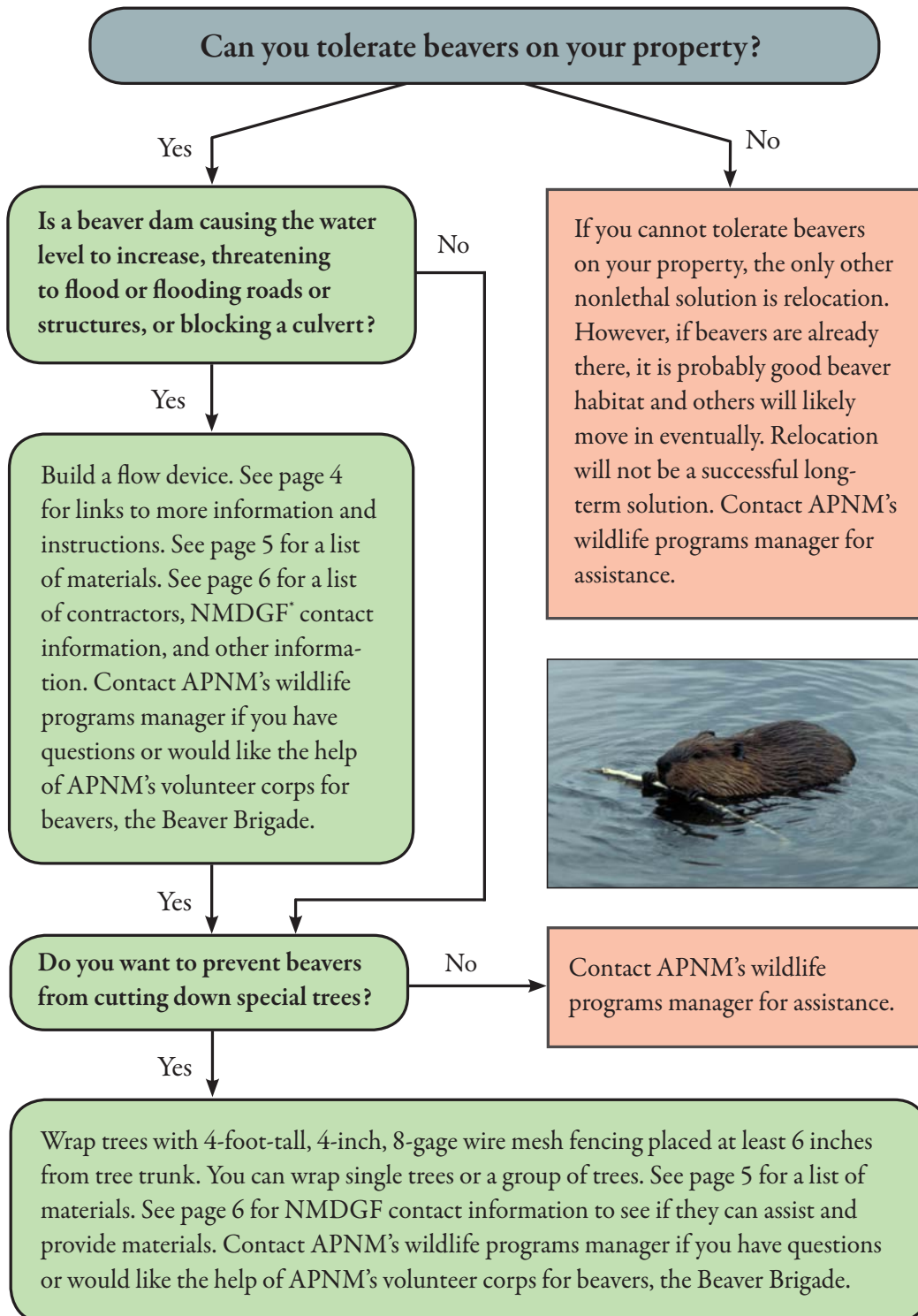




# Are you having problems with beavers?

## Are you unsure what to do about it?

Follow this flow chart for guidance



\*NMDGF is New Mexico Department of Game and Fish

# Flow Devices & Tree Wrapping



APNM has sponsored several workshops on designing and building flow devices. On page 5 is a list of contractors who have attended at least one of these workshops and can help build a device. Contact information for expert instructors and contractors from outside New Mexico is also listed. If landowners prefer to build devices themselves, information is available on APNM's website ([www.apnm.org](http://www.apnm.org)) and through other resources, though APNM recommends hiring a contractor the first time to ensure a better chance that the device is effective and successful. APNM's volunteer corps, the Beaver Brigade, may be available to assist with building flow devices and tree wrapping, though APNM does not provide design work. Contact APNM's wildlife programs manager for more information.



*To prevent beavers from cutting down certain trees, wrap them with 6-gauge, 6-inch fencing at least 1 foot away from the trees.*

## Other Resources

**[www.APNM.org/beavers](http://www.APNM.org/beavers)**

Visit APNM's website for more information and resources on beavers, including:

- Living with Beavers – a guide for solving beaver-human conflicts, developed by APNM and New Mexico Department of Game & Fish (NMDGF)
- A video from APNM's 2007 beaver workshop featuring Skip Lisle of Beaver Deceivers International training attendees how to build flow devices for a beaver dam and a culvert
- Building a Beaver Deceiver™
- US Fish and Wildlife Services' Partners for Fish & Wildlife Program – funding for habitat restoration projects, which may include flow devices for beaver dams
- More links and information

### **New Mexico Beaver Forum on Yahoo!**

This online forum contains numerous articles, links, information on upcoming workshops, and a place to discuss topics. Sign up at: [groups.yahoo.com/group/beaverforumNM/](http://groups.yahoo.com/group/beaverforumNM/).



*When beavers are cutting down trees that you want to keep, you can easily keep them away by wrapping the trees.*

# Building Materials Needed

## Culvert Flow Device

- 10" or 12" x 20'-long, double-walled, black, corrugated polyethylene pipe (may be optional)
- 6" x 6", 15'-long, 6-gage welded wire mesh
- fifteen 12'-long pressure-treated 2" x 4" boards\*\*, preferably the most knot-free as possible
- six 7'-long steel T-posts to hold the pipe down
- 1 pound each of 1½" and 2" fence staples
- 1 pound of 40d nails
- 2⅞" Fasten Master HeadLok heavy-duty flathead fastener screws
- 6- or 8-gage rolled wire
- chainsaw
- 24" bolt cutters
- cordless drill
- circular saw (at least 18 volts) with extra battery
- 18-pound sledgehammer
- 4' stepladder

## Tree Wrapping

- 4" x 4", 8-gage welded wire mesh (amount depends on number of trees to be wrapped; fencing is placed at least 6" away from trunks)
- wire cutters
- something to secure fencing into ground may be needed

\*Most information from Skip Lisle, Beaver Deceivers Int'l.

\*\*A combination of 10' to 16' lengths will work. Depending on the situation, rebar or other material could be used instead of wood.

## Beaver Dam Flow Device

- one or two 10" or 12" x 20'-long, double-walled, black, corrugated polyethylene pipe (if two, you'll need a coupler to connect them)
- 6" x 6", 15'-long, 6-gage welded wire mesh
- fifteen 12'-long pressure-treated 2" x 4" boards\*, preferably the most knot-free as possible
- six 7'-long steel T-posts to hold the pipe down
- 1 pound each of 1½" and 2" fence staples
- 1 pound of 40d nails
- 2⅞" Fasten Master HeadLok heavy-duty flathead fastener screws
- 6- or 8-gage rolled wire
- chainsaw
- 24" bolt cutters
- cordless drill
- circular saw (at least 18 volts) with extra battery
- 18-pound sledgehammer
- 4' stepladder



*Constructing a beaver decoy can be done in less than a day with a handful of volunteers.*

## New Mexico Supply Stores

### PIPE

#### Southwest Piping Supplies, Inc.

7928 Edith NE, Albuquerque  
505-898-7473

8" pipe \$4.85/ft  
10" pipe \$7.98/ft  
(\$188 for 20' pipe)  
12" pipe \$8.96/ft

### FENCING

#### CMC Construction Services

2300 First St. NW, ABQ  
505-247-4344

6" x 6", 8' x 20', 6-gage 'welded wire mesh \$38  
6" x 6", 8' x 20', 8-gage welded wire mesh \$27

#### Cook's Home Center – Taos

1055 Dea Lane  
575-737-0625

#### Cook's Home Center – Española

518 Paseo De Oñate  
505-753-2145

#### Cook's Home Center – Chama

182 N Pine Ave.  
505-753-2146

50" x 16' cattle panels \$33.57

NOTE: Prices are approximate and were obtained in early 2010.



# Field Assistance

## Contractors in New Mexico Who Build Flow Devices

Steve Carson  
Rangeland Hands, Inc.  
Santa Fe, NM  
505-470-3542 (cell),  
455-0012 (office)  
455-7060 (fax)  
rangehands@msn.com

David Blagg  
Santa Fe, NM  
505-660-6645  
jdblagg@cybermesa.com

Van Clothier  
Stream Dynamics  
Watershed Restoration  
Silver City, NM  
575-388-5296  
streamdynamics@zanex.net  
www.cimarronwatershed.org

## Expert Consultants

Skip Hilliker, Humane Society  
of the US Hotline, CT  
203-389-4411

Skip Lisle, Beaver Deceivers Int'l,  
VT, 802-843-1017  
skip\_lisle@yahoo.com

## Physical Assistance

APNM's volunteer Beaver  
Brigade can help build flow  
devices and wrap trees. Call  
APNM's wildlife programs  
manager at 505-265-2322 or  
505-205-5740.

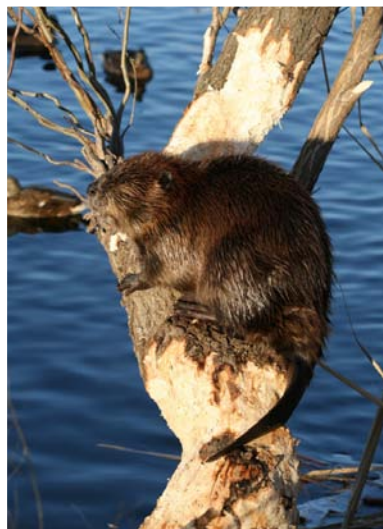
## Financial Assistance

US Fish & Wildlife Service's Partners  
for Fish & Wildlife Program assists  
with restoration projects, which could  
include flow devices. Go to [www.fws.gov/southwest/es/NewMexico/PFW\\_home.cfm](http://www.fws.gov/southwest/es/NewMexico/PFW_home.cfm) for information, or  
call 505-346-2525 or toll-free 1-800-  
299-0196.

## NM Department of Game & Fish

At the time of production of this  
guide, NMDGF can provide:

- tree-wrapping materials, and/or
- technical guidance, including how  
to live with beavers, preparing and  
using sand-impregnated paint and  
carnivore urine, and how to remove  
dams, and/or
- flow-device installation.



Animal Protection of New Mexico's  
(APNM's) mission is to advocate  
for the rights of animals by effecting  
systemic change, resulting in the  
humane treatment of all animals.

APNM has been working to promote  
the humane treatment of animals since  
1979. APNM is a nonprofit, 501(c)(3)  
organization supported by donations,  
grants, and volunteers. APNM  
accomplishes its work through education  
and outreach and campaigns for change.  
APNM encourages people to work for  
animals on a daily basis, since improving  
conditions for animals often means that  
each person must become personally  
involved. Please become a member and be  
active for animals.

Animal Protection of New Mexico  
P.O. Box 11395  
Albuquerque, NM 87192  
(505) 265-2322 • (505) 265-2488 (fax)  
[www.apnm.org](http://www.apnm.org) • [apnm@apnm.org](mailto:apnm@apnm.org)



*Help support our efforts.*

**Please donate today.**



# New Mexicans Say Flow Devices Work!

“ Our “beaver deceiver” was installed by Skip Lisle of Beaver Deceivers International in 2007. It is located underneath a bridge over the Rio Fernando in Taos, NM. Its purpose is to allow the beaver dam to remain intact, but more importantly to not allow overflow over the road to the bridge. Basically, Skip built a 6-foot by 3-foot circular cage with a 20-foot, 10-inch flexible plastic pipe coming out the lower part of it. The other end was set through the top of the dam. The pipe can be lowered or raised as necessary to control the level of the water in the pond. The water flows through the pipe, and because of the cage, the beavers cannot plug the up river end.

*In 2009, we removed the beaver dam to rebuild the bridge, but we did not move the “deceiver.” After the construction was finished, the beavers came back and rebuilt their dam better than ever right around the “deceiver.” This rig developed by Skip, who adjusts the design to suit the conditions, works exceptionally well for us and the beavers.*

–John Hall, Taos

*Flow devices are a key component to improving New Mexico’s ecological health. They help landowners and acequias raise the surrounding water table, while assuring continued water flow, improving grasslands, and benefiting all species, including humans.*

–David Blagg, Sapello



*This relatively inexpensive and easily built beaver deceiver immediately lowered the water level and allowed the beavers to stay in the area.*