

NORTH CAROLINA BEAVER MANAGEMENT ASSISTANCE PROGRAM COMPREHENSIVE POLICIES AND PROCEDURES

The North Carolina Beaver Management Assistance Pilot Program, later known as the Beaver Management Assistance Program (BMAP), was established in November 1992. Since that time the program has grown more than tenfold from four participating counties during the pilot program to 49 in state FY 2022-23. At the same time, BMAP services to the North Carolina Department of Transportation (NCDOT) have been provided to all 100 counties starting in federal FY 1998. To ensure that program administration and operation are clear, the Beaver Damage Control Advisory Board has compiled and approved the following policies and procedures.

HISTORY OF BEAVER IN NORTH CAROLINA

Historically, beaver were considered a valuable natural resource and were an extremely important part of the North Carolina economy. Well into the 1800s, beaver fur was the primary item of trade, and without trapping or hunting regulations, beaver were trapped to near extinction by the late 1890s.

In the early 1900s, the economic and aesthetic value of beaver resulted in public demand for a statewide beaver restocking effort. In 1939, in an effort to assist the public and effectively manage wildlife and natural resources in the state, the North Carolina Department of Conservation and Development (the predecessor of the North Carolina Wildlife Resource Commission; NCWRC) obtained 29 beaver from Pennsylvania and released them in North Carolina on what are now the Sandhills Game Lands. In subsequent years, demand for beaver remained high and restocking programs were continued between 1951 and 1956, with an additional 54 beaver being stocked over a nine-county area. The restocking and management efforts of the NCWRC were successful, and by 1953 there were an estimated 1,000 beaver over a seven-county area in the state. Today, beaver occupy watersheds throughout nearly the entire state with an estimated statewide population over 500,000.

While beaver populations are thriving and expanding throughout the state, resource use practices have changed, and there is no longer as high a demand for beaver products as there once was. This has resulted, in some areas, in beaver populations expanding to levels where they conflict with the health, safety, and livelihood of people.

In the early 1990s, state and county agencies and the public had few places to turn for relief from beaver damage as private trappers were few and far between and generally conducted beaver damage control activities only as a hobby or part-time job. In the early to mid-1990s, at least three North Carolina counties attempted to use bounties to reduce beaver damage. These efforts proved to have little effect on alleviating specific beaver damage problems.

CREATION OF THE BMAP

Responding to public complaints and requests for assistance, the 1991 Session of the North Carolina Legislature created the North Carolina Beaver Damage Control Advisory Board (Advisory Board) effective July 1, 1992. The Advisory Board is composed of the administrative heads, or their designees, of the NCWRC (Chair), NC Department of Agriculture and Consumer Services, NC Forest Service, NC Division of Soil and Water Conservation, NC Association of County Commissioners (replacing NC Cooperative Extension Service in 2019), NCDOT, NC Farm Bureau Federation, NC Forestry Association, and U.S. Dept. of Agriculture's Division of Wildlife Services (Wildlife Services). The Advisory Board was mandated to develop a program to manage beaver damage on public and private lands, and to advise NCWRC in the program's implementation. This included developing a priority system for responding to beaver damage complaints, developing a system for documenting activities, providing educational programs, providing for the hiring of personnel, and evaluating the costs and benefits of the program. Utilizing the expertise of NCWRC and Wildlife Services personnel, considering the history of beaver damage management efforts in the state, and drawing on the experiences of other states, the Advisory Board created the Beaver Management Assistance Pilot Program in November 1992. The primary focus of the program was oriented towards public health and safety and assistance to landholders experiencing beaver damage problems. The program was also structured to be flexible, fair, and feasible. Because of practical and ecological considerations, the program was designed to assist the NCDOT, landholders, and others to address specific beaver damage problems rather than to eradicate beaver populations over wide areas. The key to the success of the program was the active participation of the NCWRC, Wildlife Services, initial participating counties, landholders, NC Cooperative Extension Service, and NCDOT personnel. Because of the success of the pilot program, the name was changed to the Beaver Management Assistance Program (BMAP) in 1995 and made available to all NC counties.

PROGRAM IMPLEMENTATION

NCWRC is responsible for implementing BMAP, but enabling legislation allows the NCWRC to transfer program administration, upon agreement, to Wildlife Services. Presently, Wildlife Services is responsible for administration and supervision of the program, according to the plan developed by the Advisory Board and approved by the NCWRC. Wildlife specialists use an Integrated Wildlife Damage Management approach in which a combination of methods may be used or recommended to reduce wildlife damage. Wildlife specialists use proven beaver damage management techniques and equipment to alleviate beaver damage. Whenever feasible, the use of non-lethal techniques is recommended and/or implemented; however, lethal beaver removal techniques are the predominant methods used. Wildlife specialists encourage landholders not to remove beaver if they determine such activities would result in little or no benefit to the landholder. Due to practical and ecological considerations, the NCWRC does not permit relocation of beaver within the state.

When conducting lethal management activities under the BMAP, beaver are the target species. Trapping is the primary tool for removing beaver from public and private property. Wildlife Services follows trapping Best Management Practices (BMPs) developed and approved by state wildlife management agencies and the Association of Fish and Wildlife Agencies (AFWA): https://www.fishwildlife.org/application/files/2615/2105/0542/Beaver_BMP_2016.pdf. Beaver damage management techniques are used selectively to ensure public safety and minimize detrimental effects on

other animals. Non-target animals other than nutria (an undesirable species not native to North America) and muskrat (which can damage habitat and cause bank erosion) are released whenever possible. Removed beaver are offered to the landholder, disposed of in a sanitary manner, or sold (when practical and feasible) to provide additional funding for BMAP. Some may be kept for future research, study or educational needs, or other purposes. When necessary to alleviate flooding, beaver dams are removed by wildlife specialists using hand tools or explosives. All wildlife damage management activities that take place are undertaken according to relevant laws, regulations, policies, orders, or procedures.

The performance of beaver damage management actions by Wildlife Services complies with the National Environmental Policy Act, the Endangered Species Act, and all other applicable environmental statutes. In March 2015 an Environmental Assessment (EA), *Aquatic Rodent Damage Management in North Carolina*, covering beaver damage management activities conducted by Wildlife Services throughout the state was finalized. In July 2018 the Biological Assessment for the Management of Aquatic Rodent Damage in NC was completed. A new monitoring report was completed in May 2021 to meet new national environmental standards.

COUNTY PARTICIPATION

County participation is required before any direct beaver damage management assistance is provided to landholders under the BMAP. All 100 counties in North Carolina are eligible to participate. Counties must renew their participation annually. Each year, Wildlife Services sends a letter to each county advising of its eligibility to participate in the program and requesting notice of its intent to do so in the upcoming fiscal year. To participate, a county must respond by the established deadlines set forth by the Advisory Board or general statute. Beginning January 2020, General Statute 113-291.10 requires that a county intending to participate in the program shall provide written notification of this intent no later than May 1 of the preceding state fiscal year (July 1 – June 30) and shall commit \$6,000 in local funds no later than July 31 of the fiscal year for which the enrollment is sought. Counties not in the program the previous fiscal year who elect to participate will be eligible to receive BMAP services for the following state fiscal year.

Questions concerning county participation or program operations should be directed to either the Wildlife Services office in Raleigh at (919) 786-4480 or the NC Wildlife Resources Commission Division of Wildlife Management office in Raleigh at (919) 707-0050.

BMAP ASSISTANCE IN PARTICIPATING COUNTIES

Participating counties receive BMAP services based on the overall amount of funding the program receives that fiscal year, (which impacts the number of wildlife specialists that can be funded), and the total number of participating counties. The participation fee a county contributes allows landholders in that county to receive beaver and dam removal services at the reduced BMAP cost-share rate, as well as free technical assistance (guidance) from wildlife specialists. Services are provided on both public (NCDOT-owned) and private (non-NCDOT) lands in the county. Wildlife specialists typically make 80-112 site visits (42-55 non-NCDOT and 38-57 NCDOT) to each participating county in a year. Due to health and safety concerns, visits to NCDOT sites will receive priority if the situation is deemed an emergency (defined as water going over roads or water threatening to reach the road within the next

twenty-four hours). However, if a significant backlog of requests exists, non-emergency NCDOT site visits may be delayed assuring equity of service to private landholders (see *Requests for Assistance* for prioritizations). The number of site visits made in each participating county may vary depending on the funding provided and demand for services in that county each year.

EXPANDED SERVICES IN PARTICIPATING COUNTIES

Participating counties occasionally request additional BMAP services beyond those that can be covered by the standard BMAP cost-share. Generally, requests for expanded assistance require hiring additional experienced personnel, which is inherently difficult, especially if such a request is for seasonal or less than full-time work. If Wildlife Services is able to accommodate such requests, any additional work provided to landholders in the county will follow BMAP policies and procedures: only specific beaver damage problems are addressed, and landholders pay the typical BMAP cost-share fees (see *Landholder Cost Share in Participating Counties* for details). Cost-share fees paid by individual landholders will be used to support the overall BMAP. Counties requesting additional assistance pay the full costs for those services (e.g., labor, vehicle usage, supplies and equipment, etc.). In addition, both landholders and NCDOT will receive services. To receive expanded services, a county must enter into a cooperative service agreement with Wildlife Services with payment going directly to Wildlife Services.

ASSISTANCE TO LANDHOLDERS IN NON-PARTICIPATING COUNTIES

Landholders and others residing in non-participating counties (counties electing not to opt in and submit the participation fee), are ineligible to receive BMAP services. Wildlife Services may, however, enter into beaver damage management cooperative service agreements with these landholders separate from the BMAP. Full costs of services provided under these agreements are paid by the landholder.

BMAP ASSISTANCE TO NCDOT IN NON-PARTICIPATING COUNTIES

BMAP services are conducted for the NCDOT in all North Carolina counties regardless of a county's participation in the program. Funding for statewide services on NCDOT lands is provided by NCDOT via cooperative service agreement with Wildlife Services. In counties where NCDOT work is done, NCDOT typically receives 38-57 site visits in a given fiscal year (based on current funding levels, historical demand, the number of counties worked, and the program's ability to meet increasing demand). NCDOT may prioritize requests for service as needed; response time may depend on local availability of BMAP specialists and the number of backlogged agreements in that county, as equity of service is a consideration (see *Requests for Assistance* for project prioritizations). Some non-participating counties may receive varying amounts of NCDOT services depending on available funding and demand in that county.

BMAP ADMINISTRATION AND FUNDING

Implementation authority for the BMAP rests with the NCWRC, but enabling legislation allows the NCWRC to transfer program administration, upon agreement, to Wildlife Services. Presently, Wildlife Services administers the BMAP, according to the plan developed by the Beaver Damage Control Advisory Board and approved by the NCWRC. As of 2017, administration of the BMAP follows the state fiscal year (July 1 – June 30).

Funding for the BMAP comes from the NCWRC, NCDOT, participating county governments, Wildlife Services, and private landholders, making the BMAP a truly cooperative effort. Wildlife Services collects funds directly from NCWRC, participating counties, and private landholders to provide BMAP services at a reduced cost-share rate to private landholders in participating counties. Separate from the cost-share component of the program, NCDOT supplies funding directly to Wildlife Services to receive BMAP services on NCDOT rights-of-way statewide.

NCWRC COST SHARE

The NCWRC provides annual funding for the BMAP in the amount of \$385,000.

NCDOT COST SHARE

The NCDOT provides annual funding for the BMAP up to the amount of \$1,000,000. There are no additional cost-share charges to the NCDOT relating to beaver damage management along state-owned highways, roads, and bridges throughout North Carolina. If beaver damage management work must be conducted on adjacent properties to resolve a problem affecting NCDOT rights-of-way, those landholders are not charged for services.

COUNTY COST SHARE

As of August 2019, General Statute 113-291.10 sets a \$6,000 participation fee that a county government must pay so that landholders, businesses, and others residing in that county are eligible for BMAP services. Counties paying the \$6,000 fee are considered participating counties at baseline. Counties may arrange to receive expanded access to BMAP services by agreement with Wildlife Services. All county participation fees are made payable to the USDA Wildlife Services, P.O. Box 80395, Raleigh, NC 27623-0395 ATTN.: Beaver Management Assistance Program.

FEDERAL COST SHARE

In FY 2022-2023, Wildlife Services will fund \$25,000 towards the BMAP. This is also the minimum federal funding requirement set forth in NC G.S.113-291.10 (f).

LANDHOLDER COST SHARE IN PARTICIPATING COUNTIES

For purposes of this document, landholders in a participating county are those who own/lease land or operate a business in that county. This includes publicly and privately-owned businesses, municipalities, county governments, soil and water conservation districts and others. Landholders in

participating counties that request BMAP services are required to pay a cost-share fee for services as set by the Advisory Board.

Landholder cost-share fees are billed and collected by Wildlife Services or by the county, are paid for by the county, or are indirectly collected by the county through a local tax where a county funds the landholder cost-share fees. Only counties contributing \$50,000 or more for expanded services (see *Expanded Services in Participating Counties*) are given the option to collect cost-share fees directly from the landholder. In those cases, Wildlife Services does not collect any additional cost-share fees. All landholder cost-share fees collected by Wildlife Services are made available to the BMAP through a separate reimbursable agreement.

The Advisory Board has set the landholder cost share at \$25 for each separate site visit a wildlife specialist makes to a landholder's property or properties. There is no charge for the initial assessment, which is defined as the time spent with a landholder, whether in person or over the phone, to discuss the BMAP and sign any paperwork. A site visit is defined as a trip to a landholder's property or properties during which time beaver damage management activities occur. A site visit may last an entire day (as might be the case when initially setting traps on a property), or as little as 15 minutes. Landholders are also charged \$125 for beaver dam removal, but beginning July 1, 2023, that cost will increase to \$150 per beaver dam removal to reflect increasing cost of materials. Landholders requesting BMAP services that require beaver damage management work on adjacent lands are required to provide for payment of those services. Additionally, written permission from adjacent landholders is required. After 15 visits to a specific landholder's property or properties in any given fiscal year, the landholder is required to pay full costs for any additional BMAP services.

REQUESTS FOR ASSISTANCE

Landholders should make requests for assistance through their designated county BMAP liaison, as listed in the *Obtaining Services* document distributed each year to interested parties and available for download at www.ncwildlife.org/BMAP under *County Participation and Getting Help*. Counties designate their BMAP liaison when providing notification of their intent to participate in the program for the following year. The county BMAP liaison is typically selected from the county's cooperative extension service office or in some cases, their local soil and water conservation district office or other designated contact.

Requests for technical assistance, educational programs, and similar activities are given high priority and are provided at no cost to cooperators and the general public. Technical assistance includes recommendations, advice, and hands-on training aimed at teaching interested landholders and others how best to alleviate problems caused by beaver. Instructional materials are available for distribution statewide. Educational programs on beaver ecology and management are presented statewide.

Requests for direct assistance (wildlife specialists doing the work) are generally addressed on a first-come, first-served basis with top priority addressing threats to public health and safety, particularly along highway rights-of-way. Requests for help on state and county property and along highway rights-of-way should be made directly to the wildlife specialist. In general, the following priority rankings are observed when responding to requests for direct assistance:

- 1) State highways, roads, and bridges (especially in emergency situations - defined as water going over roads or water threatening to reach the road within the next twenty-four hours)
- 2) County-owned property in participating counties
- 3) Landholders in participating counties
- 4) Cities/municipalities in participating counties
- 5) Other lands (e.g., publicly traded corporations)

The following criteria define eligible locations for an NCDOT agreement that assists NCDOT and adjacent landholders:

- NCDOT rights-of-way impacted from flooding as a result of beaver dams
- NCDOT culverts or bridges blocked with beaver dam debris
- Beaver activity including digging or burrowing in road beds along NCDOT rights-of-way

Logistic or travel cost considerations may require that some requests be worked out of order. In special cases, priority work areas may be established as determined by the wildlife specialist. Whenever possible, all requests for assistance will receive an initial response by telephone within 72 hours. Time of site visits and field work will vary according to current workloads.

Before assistance begins, the wildlife specialist makes an initial assessment with all relevant landholders to determine the extent of the problem caused by beaver, if any, and makes recommendations on the best course of action for addressing the damage problem. Currently, the wildlife specialist offers to teach the landholder(s) how to address the problem, including hands-on training on the landholder's property. If the landholder is unable or uninterested in conducting the work his/herself and requests that the wildlife specialist conduct the work, the wildlife specialist estimates the time and cost share the landholder must pay to receive the recommended beaver management services. The landholder(s) signs an agreement that includes the estimated costs, the type of activities to be conducted on his/her land (e.g., trapping, shooting, installation of water control devices), and the granting of permission for wildlife specialists to work on his/her land.

Wildlife specialists do not remove beaver and their dams if such activities are expected to have little benefit in protecting timber, agricultural interests, roadways, other property such as sewer systems or wastewater treatment facilities, or in protecting human health and safety. Sometimes a beaver damage problem affecting a landholder originates on adjacent properties not owned by the landholder. In these cases, the landholder requesting the services pays for any work done on those adjacent properties. Further, wildlife specialists will work on adjacent lands only if written permission is received from adjacent landholder(s).

LANDHOLDER GUARANTEE

BMAP activities are guaranteed for 30 days following the completion of a project. If a problem recurs within the guarantee period, the project is reworked at no additional charge.

PERSONNEL AND REPORTS

BMAP WILDLIFE SPECIALISTS

Wildlife specialists are hired by, and work directly for, Wildlife Services. The number of specialists hired as full-time or part-time employees is determined by the BMAP budget. Wildlife specialists generally work year-round as weather and other conditions allow.

Demand for beaver damage management activities on public and private lands varies throughout the year, with the least demand coming during the summer months. During such slow periods, wildlife specialists occasionally work on non-BMAP related projects that might be available. All costs (salaries, vehicle usage, supplies, equipment, etc.) associated with such work are covered by the other project's budget, reducing costs for the BMAP. This is a definite advantage to BMAP customers as additional BMAP services can be offered during more critical times of the year such as the winter season.

SUPERVISION AND RECORD KEEPING

Wildlife specialists are supervised out of the USDA Wildlife Services District Offices located in Greenville, Statesville, and Elizabethtown.

Wildlife specialists and supervisors maintain records of all appropriate BMAP-related information with records based on the state fiscal year (July 1 – June 30). Information is provided to the NCWRC during periodic Advisory Board meetings and as needed throughout the year. An annual report documenting all activities during the state fiscal year is provided to the Advisory Board and the NCWRC for review no later than October 1 following the end of the state fiscal year. County officials are also kept informed of progress through periodic meetings and/or reports.

Landholders are kept updated about ongoing work on their property. Once a project is complete, the landholder is sent an invoice listing the beaver management activities conducted on his/her land, including numbers of beaver and/or beaver dams removed, number of site visits, work start and stop dates, and cost. Landholders are given 30 days following billing to pay their cost share. Landholders not paying for services will be ineligible for any future services.