

Section 6

General Recommendations

This section of the Rondout Creek Management Plan is a detailed list of voluntary recommendations for specific programs and tasks to improve stream management activities along the Neversink River. Through a funded five-year contract with NYC DEP, Sullivan County Soil & Water Conservation District (SCSWCD) established a Field Office in January 2010 to coordinate this effort. The multi-faceted nature of Stream Management Planning requires that all those interested in stream health work together: streamside landowners, residents, town officials, county agencies and departments, teachers, students, and recreationists.

Earlier sections of this Stream Management Plan (SMP) gave site-specific recommendations for management of the Neversink River stream system. The purpose of this section is to describe comprehensive solutions that serve both the Towns of Denning and Neversink and the people of the Rondout and Neversink watersheds. These recommendations will evolve over time according to the input, priorities and needs of the participating stakeholders and communities.

Recommendation Categories

6.1 Program Coordination & Tasks

6.2 Water Quality

6.3 Riparian Buffers

6.4 Flood Protection

6.5 Aquatic & Terrestrial Wildlife

6.6 Education & Outreach

6.7 Public Recreation

6.8 Municipal Coordination

6.1 Program Coordination & Tasks

Few watersheds in the world have been the subject of the detailed level of resource management ongoing in the City of New York water supply. Since its inception in 1997, this comprehensive effort to advance water quality protection has achieved significant success. In the years since the historic watershed Memorandum Of Agreement, a comprehensive program focused on stream restoration, septic system replacements, stormwater projects, farm and forestry management, community planning, and municipal waste water system development, has been initiated and is making excellent progress.

To provide further coordination and to move forward with implementation of the Rondout Creek Management Plan, a number of program recommendations are presented. In most cases, the Project Team proposes that these issues be addressed on a major watershed basis (i.e. Rondout Reservoir Basin-scale). Given the number of recommendations, the diversity of interests and the magnitude of the effort required, mobilization of the public and coordination of the agencies/interest groups is necessary to avoid duplication, gain efficiency and reduce conflict.

6.1.1 Annual Action Plans

Recommended: that together with Watershed Advisory Group, SCSWCD develop Annual Action Plans to communicate priorities and progress on specific program initiatives.

Notes Annual Action Plans describe stream management plan implementation priorities and serve as a vehicle to update the public on progress made towards completing specific initiatives as agreed upon by the Watershed Advisory Group. These two-year plans are updated annually.

6.1.2 Selective Stream Gravel Management

Recommended: that an independent stream scientist be funded to create a guidance document with recommendation on how, when and where to scientifically manage problematic gravel deposits within the Neversink watershed.

Notes Numerous concerns have been expressed regarding current policies and regulations restricting gravel removal. It is the Stream Management Program's role to investigate these issues by advancing discussion with the appropriate regulatory agencies.

6.1.3 Debris Management

Recommended: that a protocol be developed for the inventory of floodplain debris and assistance to municipalities and communities in debris management.

Notes Develop protocol to ensure responsible floodplain management, including annual clean-up efforts, prevention of illegal dumping, and flood event debris management. The Program Team may need to explore issues of landowner liability for managing large woody debris. Removal of large woody debris would focus on areas that pose a flood hazard to infrastructure and a threat to human welfare.

6.1.4 Advisory Committees – Technical & General

Recommended: that a watershed-wide advisory committees be convened in overall and technical areas.

Notes The Watershed Advisory Committee, and its evolving subcommittees, have so far provided avenues for stakeholder and expert input into stream management planning and restoration activities in order to develop a locally sustained form of watershed management. The committees also offer regular information exchange between stream managers and interested local, state and federal parties.

6.1.5 Updating & Revision of Neversink Stream Management Plan

Recommended: that data and information within the Plan be reviewed and updated (if necessary) on a ten-year cycle.

Notes Science, laws and public issues may change considerably in a ten year period. It is recommended that the Neversink Stream Management Plan cite and reference the most current state of knowledge about stream management and its founding principles. Additionally the Plan communicates current landowner priorities and concerns.

6.1.6 Technical Assistance

Recommended: that long term access to technical assistance be provided to landowners and municipalities for assessment of their stream-related problems, development of effective management strategies and supervision stream project implementation.

Notes It is recommended that the Sullivan and Ulster County Soil and Water Conservation Districts, NYCDEP and local municipalities evaluate how to insure long term availability of the high levels of technical resources currently available in the Neversink Watershed.

6.1.7 Public Lands

Recommended: that governmental landowners in the Neversink watershed manage their lands using natural channel stability concepts, and serve as a model for other watershed landowners.

Notes If NYSDEC, NYCDEP, municipalities and local institutions (i.e. town parks), conduct an evaluation of all riparian lands and identify protection, restoration and management needs, projects can be implemented to protect, restore and manage stream areas according to the recommendations set forth in this SMP.

6.1.8 Future Stream Stability Restoration

Recommended: Secure funding commitments for additional unfunded restoration projects on the Neversink River as discussed in individual management segments.

Notes In this Plan, the Project Team identified a number of reaches which are strongly recommended for restoration. Additional restoration sites should be prioritized, ranked and continuing funding sought.

6.1.9 Post-Flood Technical Assistance

Recommended: to work cooperatively on improving immediate post-flood emergency intervention capabilities through demonstration and training with contractors and local municipalities in scientifically-based stream principles, procedures and methods.

Notes In many areas post-flood work unravels stream systems more than any other non-flood work combined. Using Delaware County SWCD's contractor training workshop as a model, provide local contractors and highway superintendents with training on regional hydraulic relationship curves, natural stream restoration principles and techniques, and identifying best management post-flood intervention techniques.

6.1.10 Education and Outreach Working Group & Strategy

Recommended: that the Sullivan and Ulster County Soil and Water Conservation Districts facilitate the formation of an Education & Outreach working group to develop a detailed E&O strategy in the context of the larger West of Hudson watershed.

Notes A priority focus for initial workshops and instruction is on residents, municipal leaders and local planners and potential Rondout Creek Watershed Association members. Tactics for outreach to part-time residents are an important component of this strategy.

6.2 Water Quality

New York City residents and watershed landowners alike rely on the Neversink River's runoff to meet their drinking water needs and as a critical resource to their local communities. Maintaining high water quality in the Rondout Creek and its tributaries is important to recreational activities, drinking water and ecological health of the stream system. The following recommendations are made based upon an awareness of on-going efforts in the NYC watershed, and in some cases may require further investigation and analysis to refine the scope of any proposed activities.

6.2.1 Identify Locations of Potential Water Quality Impairments

Recommended: that a review existing water quality data take place to identify the most significant water quality impairments and the locations of potential water quality impairments including, sources of pollution from upland areas and within the stream channel (i.e., significant glacial lack clay exposures), and sources of contaminants from road runoff and households.

Notes Potential impairments to water quality can come from many non-point sources affecting both surface and ground water supplies.

6.2.2 Critical Area Seeding Program

Recommended: that local municipalities, Sullivan and Ulster County Highway Departments and NYSDOT place a priority on vegetation management on critical areas such as roadside ditches and steep slopes.

Notes The Sullivan County Soil and Water Conservation Districts currently owns a hydroseeder and has begun hydroseeding on Denning and Neversink sites identified by Highway Department staff.

6.2.3 Road Abrasives Program

Recommended: that the Towns of Denning and Neversink evaluate winter road abrasive applications to address abrasive quality, application methods and spring sweeping.

Notes Winter road abrasive materials containing high silt/clay content have a direct impact on water quality. Cost share funding may be needed to provide an incentive to use more highly priced washed sand materials.

6.2.4 Watershed Assessment of Major Neversink River Tributaries

Recommended: that a watershed assessment be conducted of those Neversink tributaries that contribute a majority of the total Neversink discharge and a significant portion of the total sediment load.

Notes A study of the tributaries can identify long-term chronic fine sediment sources, erosion hazards, dump sites and other potential water quality impairments and associated treatment opportunities, followed by recommendations for restoration practices.

6.2.5 Highway Activities and Infrastructure for Water Quality Improvement

Recommended: that the Town and County Highway Departments and NYSDOT integrate geomorphology principles in all new projects and routine maintenance activities related to the Neversink River stream system.

Notes Road/drainage infrastructure improvements are of particular interest to respondents of the Streamside Landowner Survey (Gilmour 2009). Activities related to maintenance of highway infrastructure accounts for the vast majority of stream management activities. Highway activities including maintenance, new construction and flood response, can greatly benefit from consideration of stream process. One possible area for collaboration is the creation of a protocol to evaluate existing culverts and bridges following geomorphic principles, and working together to prioritize and design culverts for retrofitting and replacement where necessary.

6.2.6 Stream Stability Restoration

Recommended: Secure funding commitments for additional unfunded restoration projects on the Neversink River as discussed in individual management segments.

Notes In this Plan, the Project Team identified a number of reaches which are strongly recommended for restoration. Additional restoration sites will be prioritized, ranked and continuing funding sought.

6.3 Riparian Zone Management

Healthy vegetation in riparian buffers is paramount to water quality and stream stability. These buffers filter upland pollutants; provide rooting mass for bank stability and lower stream water temperatures. While some riparian vegetation is present throughout most of the Neversink River stream corridor, often the size and structure of the buffer (width, plant density, plant size distribution and diversity of plant species) is inadequate to ensure long term protection of the stream. These recommendations address preservation/protection of buffers, establishment or enhancement of buffers and control of invasive species.

6.3.1 Establish Riparian Reference Reaches

Recommended: that riparian reference reaches be identified and documented.

Notes Utilize NY Natural Heritage pilot study on West Kill as protocol for establishing riparian reference reaches. The information can be utilized for designing riparian restoration projects and for evaluating success of restoration efforts. Results of this study would inform areas to preserve from disturbance.

6.3.2 Inventory Watershed Wetlands

Recommended: that undocumented wetlands be inventoried and characterized. Confirm delineations of NYS DEC and NWI wetland areas.

6.3.3 Catskill Streams Buffer Initiative

Recommended: that Catskill Streams Buffer Initiative be implemented to provide streamside landowners with direct technical assistance in restoring, enhancing, and/or protecting riparian buffers.

Notes To promote effective buffer management, detailed technical information on vegetation management (mowing, pruning), planting methods, plant selection and other topics is essential. Access to local technical resources helps landowners evaluate their property and develop site specific recommendations in the form of Riparian Corridor Management Plans. Effective assistance would include site evaluations, development of site buffer management plans, and facilitation of access to watershed programs which support buffer establishment and protection (i.e., encouraging buffers as a garden landscape feature with both aesthetic form and qualities to stabilize stream banks).

6.3.4 Riparian Conservation Easements

Recommended: that long term riparian buffer protection be provided through permanent conservation easements for both currently degraded and intact buffer areas.

Notes The Sullivan and Ulster County Soil and Water Conservation Districts can convene a committee of interested parties to review all existing options to obtaining easements; evaluate roadblocks to increasing landowner participation and develop an easement program to increase participation by interested sellers.

6.3.5 In Lieu Compensatory Mitigation

Recommended: that NYSDEC and the United States Army Corps of Engineers (USACOE) evaluate buffer restoration projects as a possible mitigation alternative on projects with smaller scale disturbances.

Notes NYSDEC and the USACOE have increasingly allowed alternate mitigation activities when applicants are addressing minor impacts, or if site and/other conditions do not allow “replacement” mitigation. The Project Team recommends that the regulatory agencies give greater consideration to requiring applicants to fund, or undertake, riparian buffer restoration projects “in lieu of” mitigation when appropriate. The USACOE is developing guidance for compensatory mitigation and the Sullivan and Ulster County Soil and Water Conservation Districts participated in a committee that provided feedback to the USACOE.

Invasive Species

As noted previously in this Plan, invasive species threaten the vitality of riparian buffers. Although the Neversink River is not currently impacted by the presence of invasive Japanese knotweed, Japanese barberry appears to be the most widespread invasive plant within the riparian area. Other invasive plant species are present, but limited in extent. Of greater concern may be the potential impact of forest pests such as Emerald Ash Borer and Asian Long-horned Beetle.

6.3.6 Participate in CRISP

Recommended: that the program support regional invasive species efforts, primarily by participating in the Catskill Regional Invasive Species Partnership (CRISP).

Notes Coordination and communication with the Neversink Association, Frost Valley YMCA, Winnisook Club, and other large parcel landowners are imperative to effective, efficient management of and education about invasive species.

6.3.7 Knotweed-Free Areas & Spread Prevention

Recommended: that a knotweed-free area be established for educating the public, highway departments and general contractors about the threats of Japanese knotweed colonization and avoiding the spread of this invasive plant.

Notes The community can promote being “knotweed-free” and maintain this status. Outreach efforts can foster peer to peer influence on avoiding the spread of Japanese knotweed.

6.3.8 Invasive Species: Early Detection & Rapid Response

Recommended: that an effective early detection & rapid response protocol to prevent the spread of all invasive species be implemented through collaboration among private landowners, recreational users and local, county and state agencies.

Notes While invasive species with the stream and riparian environments are first priority, the Project Team could remain active in efforts to universally address invasive species because devastation from infestations (i.e., Emerald Ash Borer, Asian Longhorned Beetle, *Didymosphenia geminata*) would have dire consequences to overall stream health.

6.4 Flood Protection

The impact of floods on private property, public infrastructure and the quality of life has historically been a primary concern of many watershed stakeholders and continues today, as indicated by the Streamside Landowner Survey (Gilmour 2009). Though the valley is highly prone to flood events due to its local climate, topography and geology, stakeholders can work proactively to reduce or prevent their impacts. Flood-related damages and recovery expenses strain local resources and disrupt the fragile economy of the community. The recommendations in the following section represent on-going projects and proposed initiatives which could be implemented to reduce flood impacts.

6.4.1 Historic & Current Condition Analysis & Documentation

Recommended: that historical records for precipitation metrics be analyzed so current trends in precipitation amount, intensity, timing of snowmelt and other forces potentially affecting flood frequency and stream flow response can be shared with planners seeking to mitigate their effects.

6.4.2 Flood Response Technical Resources

Recommended: that trained professionals be identified to provide onsite guidance for stream modifications immediately following flooding. Guidelines that integrate stream form and function should be developed for use during post flood response.

Notes The existing approach to flood management of patching flood damage without stream process knowledge wastes limited funding, may leave localities more vulnerable to future floods and may create liability for already devastated communities. Guidelines for work on flood damaged with minimal stream disturbance would greatly reduce risk of further instability. Stream professionals can provide for rapid and coordinated expert review and guidance on a regional basis during planning, funding, permitting and construction phases of flood remediation.

6.5 Aquatic & Terrestrial Wildlife

The Neversink River is considered the birthplace of American flyfishing. Historically, it was characterized as a thriving trout stream sought by landholders for this purpose above all other uses. . The Project Team did not conduct a detailed fisheries assessment of the Neversink but it is considered to have better than average water temperature regimes in the warmer summer months. The recommendations below for continued monitoring and improvement in fish cover relate to both healthy stream buffers and storm water protection.

6.5.1 Detailed Fisheries Assessment

Recommended: that a detailed assessment of fisheries conditions within Neversink watershed be conducted by local students using NYS DEC protocol.

Notes The development of the Plan did not include a detailed assessment of current and potential fisheries conditions; it is recommended that this work be conducted in the future. A more detailed assessment could identify factors that may currently stress the fisheries in the stream and identify critical cold-water habitat (i.e. spring seeps) as well as effective management activities that could be expected to benefit fisheries.

6.5.2 Fisheries Research

Recommended: that the program support efforts to research various aspects of the fish population in the Neversink watershed.

Notes Some studies may include, but are not limited to: 1. thermal effects on streams, 2. cumulative thermal effects of ponds and lakes on streams, or 3. mercury contamination.

6.5.3 Restoration Project Fisheries Assessment

Recommended: that the Sullivan and Ulster County Soil and Water Conservation Districts continue to support the NYCDEP/USGS effort to evaluate fisheries benefits associated with restoration projects.

Notes The Sullivan and Ulster County Soil and Water Conservation Districts can continue to provide technical support to assist the USGS and NYCDEP in conducting post-construction monitoring of fisheries habitat conditions at restoration project sites. Monitoring will confirm restoration project benefits to fisheries, and build local capacity to monitor aspects of these projects and fisheries in the remainder watershed.

6.5.4 Habitat Improvement Projects

Recommended: that stream managers concerned with the natural resource continue to review and implement specific projects or measures to improve fisheries and other wildlife habitat conditions.

6.5.5 Wildlife & Biodiversity Assessments

Recommended: that the stakeholders support wildlife research and biodiversity assessments.

Notes Further aquatic bio-monitoring and studies of other wildlife, their habitats, and interactions in the watershed by interested groups or students is useful baseline knowledge in stream management planning.

6.6 Education and Outreach

People protect what they care about, and they care about things that they understand and appreciate. Increasing public awareness about the importance of the Neversink watershed is critical to the success of this Plan, which promotes new concepts related to stream and watershed management, recommended below as focus areas for public education and outreach.

6.6.1 Educational Workshops

Recommended: that the Sullivan and Ulster County Soil and Water Conservation Districts host workshops targeted to various audience groups to foster long-term stream stewardship ethic.

Notes Workshops can address topics such as basic stream processes and functions. Another area of potential interest indicated by the Streamside Landowner Survey includes the status of wetlands and fishery in the basin. Education can contribute to growing community awareness of threats posed to the watershed by invasive species.

6.6.2 Professional Training

Recommended: that the Program Team and its partners seek regular training opportunities through conferences, workshops and regional meetings to stay abreast of current stream and watershed management approaches and techniques.

6.6.3 Volunteer and Input Opportunities

Recommended: that the program provide ample input opportunities for residents of the Neversink watershed related to beneficial streamside stewardship.

Notes Continuous feedback from the community is essential to a successful stewardship program through public meetings, follow-up surveys, face to face house calls, small focus groups and other informal methods. Volunteer opportunities might include planting projects or subcommittee participation. An effort should be made to poll sectors of the community that may not have been well-represented in the original public opinion survey for streamside landowners.

6.6.4 Web Based Outreach

Recommended: that a web site or other online tool be developed to provide information to watershed stakeholders. Upgrade site to allow landowners interaction such as reporting stream changes, problems etc.

Notes The internet is important to provide out of town landowners provide with access to publications and project updates.

6.6.5 News Media Outreach

Recommended: that the Program Team in work cooperatively to develop a series of columns for publication in local newspapers.

Notes Existing staff at watershed SWCDs, NYCDEP and other programs could contribute to a column that would be distributed under an established banner. Goal is to develop an identity for accurate information. Columns can address general concepts, but can also provide timely updates on floods, program activities, etc.

6.6.6 Stream Management Publications

Recommended: that a series of publications focused on stream management be provided to watershed stakeholders and/or used in training workshops

Notes Publications can be formatted as fact sheets or landowner stream management guidelines and may include existing work as well as resources developed for the broader NYC watershed area.

6.6.7 Practical Training

Recommended: that municipal highway departments and local contractors be provided with hands-on training in various stream management activities. Conduct field days, workshops and demonstration projects to meet this goal.

Notes The Team recommends that a comprehensive “hands-on” training program be developed for those entities that are actively involved in stream management activities. The training would provide information on construction methods, stream stabilization tools (i.e. rock structures). Workshops will be most effective when providing hands-on or site-based training.

6.6.8 Stream Management Guidelines

Recommended: that detailed, science-based guidelines about natural stream channel stability and function be made readily available to those responsible for stream activities in the Neversink watershed.

Notes Guidance will be useful in routine activities as well as emergency situations and includes items like problem assessment methods, regional hydraulic geometry curves, construction methods, environmental protection standards and other resources required for planning an effective project. Making this updated information readily available to project designers and sponsors. Guidelines include items such as typical drawings, specifications, permitting instructions and other information that a project sponsor would need.

6.6.9 Flood Damage Prevention Library

Recommended: that the Program Team develop a “one stop shop” for public distribution of National Flood Insurance Program publications; and that an annual notice be published in local newspapers providing notification about the availability of this flood damage prevention library.

Notes FEMA, the National Association of Floodplain Managers and others have developed extensive materials to assist watershed stakeholders in making sound development decisions related to flooding and flood damage prevention.

6.7 Public Recreation

Historically, the Catskills have been a draw for a range of recreational activities. Hiking, camping, fishing, hunting, trapping and family vacations at the former great resorts have brought people from the surrounding metropolitan areas. Although tourism has changed since the peak of the grand resorts in the Catskills, local communities understand their role in the new emphasis on “place-based” tourism. The following recommendations could enhance public use and enjoyment of the stream system.

6.7.1 Community Visioning of Needs re: Tourism Promotion

Recommended: Project Team to facilitate a community discussion and visioning process about the current level of historical, cultural and recreation-based tourism in the Neversink watershed to determine community preferences regarding the desired level of promotion of recreational opportunities.

6.7.2 Economic Analysis of Fishing-based Tourism

Recommended: that an economic analysis and review of resource limitations/needs be conducted.

Notes Studies of fisheries based tourism in the lower Catskills have found these activities to have a significant benefit to the local economy. A study to address stream conditions, resource limitations and the status of support industries such as tackle shops can aid in broader Catskills regional tourism efforts.

6.8 Municipal Recommendations

The following recommendations are specifically for towns and other local municipal governments. Local municipalities play an important part in ensuring that proper stream management takes place within their boundaries. Local governments are on the frontlines of stream events (such as flooding) and proper preparation and management can help to alleviate some of the problems associated with floods and their aftermaths.

6.8.1 Town Adoption of Management Plan & Principles

Recommended: that the Towns of Denning and Neversink review and adopt the Plan and its associated Stream Stewardship Principles.

Notes Scientifically-based stream management practices are essential to the long-term health and stability of waterways flowing throughout the Rondout watershed. Following the principles of proper stream stewardship will ensure the preservation of stream health, aesthetics, recreational opportunities, water quality and aquatic habitat, and reduce or prevent costly restoration and repairs stemming from damages caused by unstable stream systems.

6.8.2 Digital FIRM Maps

Recommended: that the Towns of Denning and Neversink support the development of the digital flood maps in progress for the Neversink Watershed by actively participating in the review of draft maps; and that the Sullivan and Ulster County Soil and Water Conservation Districts provide technical and logistical support to the NYSDEC mapping effort as available and support local municipalities in the use of the new FIRM maps.

Notes New user-friendly flood hazard maps integrate the latest digital map production and presentation technologies to produce highly accurate maps which are based on detailed aerial photography and terrain maps.

6.8.3 Flood Ordinance Review

Recommended: that the Towns of Denning and Neversink conduct a review of current floodplain ordinances and consider adopting revisions that integrate broader community plans, reflect current building codes. It is also recommended that the Towns of Denning and Neversink acquire and utilize geographic information system (GIS) software to assist with floodplain mapping.

Notes The Sullivan and Ulster County Soil and Water Conservation Districts can provide technical and administrative support to the review process in consultation with NYSDEC and the Sullivan and Ulster County Planning departments respectively. Consider the difference between the floodplain (flat or nearly flat land adjacent to a stream or river that experiences occasional or periodic flooding and floodway) and floodway (stream channel and adjacent areas that carry flood flows).

6.8.4 Community Rating System

Recommended: that the Towns of Denning and Neversink consider participation in the FEMA Community Rating System.

Notes Municipalities may be able to reduce flood insurance premium rates under the Community Rating System. The Municipalities are strongly encouraged to adopt a “No Rise/Good Neighbor” clause in their revised floodplain ordinance. A “No Rise/Good Neighbor” clause would charge townships to develop codes which would prevent new construction from causing a rise in floodwaters.

6.8.5 SFHA Notification

Recommended: that the Towns of Neversink and Denning facilitate periodic notification to landowners who have special flood hazard areas (SFHA) located on their property.

Notes Recent digitization of the real property tax parcels in the NYC watershed, and the development of digital flood maps by NYSDEC can be integrated into a database which would allow for notification of landowners regarding the presence of SFHA on or near their property or business. The database can be used to develop a mailing list of properties with a SFHA present, and periodically a direct mailing can be made to each property owner.

6.8.6 Flood Hazard Education Sessions

Recommended: that the Towns of Denning and Neversink, working with local and state agencies, support periodic training sessions on flood related issues; and that the audience include municipal leaders, code enforcement staff, planning boards, landowners, realtors, lending institutions and others.

Notes Knowing how to properly manage floodplains is crucial to continued safety and economic sustainability. NYSDEC and the New York State Department of State (NYSDOS) have established education programs geared to local municipalities. Better understanding of flood damage potential, stormwater implications, the NFIP, and use of Federal Insurance Rate Maps will empower local officials to make informed decisions.

6.8.7 Flood Damage Database

Recommended: that the Towns of Denning and Neversink facilitate development of a flood damage reporting system to track types of flooding, their location and the costs associated with flood damage.

Notes Initially, a database would collect overall records on past floods; then localized flooding occurrences and damages could be documented. Areas with repetitive damage can be prioritized for mitigation because this cumulative cost damage data provides justification for mitigation grant program funding. Training and administrative support would ensure success.

Sources

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