

Health in All Policies: Natural Resources

Health in All Policies recognizes that health is determined not only by genetics, health care, and individual behaviors but by a complex set of social, economic and environmental factors. This document highlights current action to integrate health and health equity into budgetary, programmatic, and policy decision-making in the natural resources sector.

Why This Matters

Respect. Protect. Enjoy. The Vermont Agency of Natural Resources promotes the sustainable use of Vermont's natural resources, protects and improves the health of Vermont's people and ecosystems, and promotes sustainable outdoor recreation. Vermonters are proud of our state's beautiful natural resources. Parks, forests, wildlife, lakes, rivers; we have many opportunities for fun, physical activity, that supports and improves physical and mental health. The economic benefits of natural resources are also important to public health.

Sector: Natural Resources

Mission: The Vermont Agency of Natural Resources promotes the sustainable use of Vermont's natural resources, protects and improves the health of Vermont's peoples and ecosystems, and promotes sustainable outdoor recreation.

Vision: To draw from and build upon Vermonters' shared ethic of responsibility for our natural environment, an ethic that encompasses a sense of place, community and quality of life, and an understanding that we are an integral part of the environment, and that we must all be responsible stewards for this and future generations.

Contact: Neil Kamman, neil.kamman@vermont.gov

Budget

Sustainability

- ▶ Across multiple programs, the Agency's budget supports sustainability of environmental protection to support ecosystem services, and resilient infrastructure that supports equitable access to public health and safety.
- ▶ Support language access and translation services for deaf, blind, deafblind, and hard of hearing, English Secondary Language and Non-English speakers, translation services, dyslexic friendly font, and mobile-friendly website formatting.

Forests, Parks, and Recreation

- ▶ Work across agencies and boards to include health considerations and goals in budgeting for the acquisition of land.
- ▶ Provide opportunities for all Vermonters to have active lifestyles, access to the outdoors, and safe available places for recreation and physical activity.
- ▶ Deploy tools to enable Vermonters to take precautions against the inherent risks of outdoor recreation such as melanoma, ticks, and cyanobacteria.
- ▶ Support grant programs that maintain working forests and promote development and maintenance of public access and recreational opportunities and facilities that keep Vermonters and visitors outdoors.
- ▶ Support the rural economy in the forest products and recreation sectors, which positively impacts these communities.
- ▶ Promote sustainable forest management on private and public lands to enhance and protect forest, soil, water, air, wildlife and other natural resources and mitigate climate change and flood impacts. This includes promoting Harvest Guidelines and use of the [Acceptable Management Practices for Logging Jobs in Vermont](#).
- ▶ Operate the Vermont State Parks System and provide opportunities to new users and under-represented populations through programs such as the Parks Rx Program.

Water and Waste

- ▶ Maintain funding for comprehensive management of clean water (watershed management, drinking and groundwater, and recreational water uses).

- ▶ Provide grants and loans for municipalities through programs like the State Revolving Loan funds to develop necessary water infrastructure for initiatives that contribute to building healthy and thriving communities (e.g., brownfield redevelopment and downtown development and growth).
- ▶ Deliver technical and financial assistance for cleanup and redevelopment of previously contaminated sites to reduce exposure to hazardous materials, enabling safe residential and commercial use.
- ▶ Provide low or no-cost loans and financial assistance to residential property owners and manufactured housing communities to provide safe and reliable drinking water sources and wastewater disposal systems to support public and environmental health.
- ▶ Direct funding towards projects and municipalities to deliver environmental improvements including funding for solid waste infrastructure and assisting with emerging contaminants.
- ▶ Offer targeted financial assistance to property owners for initiatives that promote public and environmental health, such as residential heating oil tank replacement, underground storage tank replacement or removal, support for obtaining permits under the three-acre stormwater rule, and if necessary, mitigation or removal of unsafe dams on private property.
- ▶ Help schools mitigate PCB contamination, prioritizing the highest risk situations with available funding.

Air Quality

- ▶ Maintain capacity to conduct air quality monitoring, permitting and enforcement.
- ▶ Maintain Vehicle Inspection/Repair Pilot Program for low-income Vermonters.

Climate Change

- ▶ Support State of Vermont investments to help Vermonters save money and reduce greenhouse gas emissions and invest in resilience and adaptation priorities.
- ▶ Develop annual greenhouse gas inventory to track where Vermont stands in meeting its statutory emission reduction targets.
- ▶ Develop and implement a tool to measure and assess indicators of progress related to reducing greenhouse gas emissions and increasing resilience and adaptation to a changing climate in Vermont.
- ▶ Develop and prioritize health implications and recommendations in the Climate Action Plan.

Fish and Wildlife

- ▶ Sponsor hunter education courses and promote safe hunting practices to maintain the significant decline in hunting-related injuries.
- ▶ Invest staff time, training and resources into public health-related activities including responding to potentially diseased or otherwise dangerous wildlife; monitoring for new and existing wildlife diseases that may pose a risk to humans; and reducing the number of wildlife-vehicle collisions.
- ▶ Invest staff time, training and resources, primarily through State Game Wardens, into public safety-related activities including search and rescue; snowmobile, boat and ATV enforcement; hunting incident investigation; roadkill removal; general state law enforcement; and, when needed, assisting other state and federal law enforcement agencies.
- ▶ Offer reduced rate and free license options for legally disabled individuals.
- ▶ Conserve land to meet [30x30 goals](#) (30% of Vermont's total land area shall be conserved by 2030, and 50% shall be conserved by 2050) while considering the impact on diverse populations so all people in Vermont have access to conserved or wild spaces.

Policy

Sustainability

- ▶ Consider health equity and environmental justice in natural resources procurement, contracts, legislation, rules and policies.
- ▶ Work across agencies within the Interagency Initiative to promote Smart Growth, Complete Streets, Concentrated and Mixed-Use Development, Sustainability and other such policies that benefit health and are vital to economic development.

Forests, Parks, and Recreation

- ▶ Pursue policies that limit fragmentation of forests to protect and maintain healthy forest lands.
- ▶ Work across agencies and boards to include health considerations and goals in state land-use and long-range management plans.
- ▶ Provide smoke and tobacco free spaces policies in State parks.

- ▶ Make state parks, forests, and open green spaces accessible, safe and available as places of recreation and physical activity for all users.
- ▶ Work with the Vermont Outdoor Recreation Economic Collaborative to consider health goals in the growth and promotion of the outdoor recreation industry.
- ▶ The Department of Forest, Parks, and Recreation supports the implementation of [Move Forward Together Vermont's](#) priorities and supports partners engaged in the outdoor recreation economy.

Water and Waste

- ▶ Incorporate public safety and health considerations in the implementation of best practices, establishment of new programs, and ongoing clean water and site remediation funding actions including emerging contaminants.
- ▶ Protect recreational and drinking water (public and private) quality as affected by storm water, chemical contamination, cyanobacteria and other known and emerging contaminants.
- ▶ Coordinate with the Department of Health to communicate health risks associated with poor water quality and contaminated sites.
- ▶ Coordinate with the Department of Health and all other agencies in the development of scientifically based, cost effective human health criteria in relevant chapters of the Vermont Environmental Protection Rules.
- ▶ Enforce water quality and waste management regulations that support health.
- ▶ Work collaboratively across agencies and with various partners on clean water and waste management practices.
- ▶ Prioritize access to assistance to underserved populations.

Air Quality

- ▶ Promote the public and environmental health benefits of reducing emissions of air pollution, including criteria pollutants, air toxics, and greenhouse gases.
- ▶ Participate in state and regional planning efforts to reduce emissions of criteria air pollutants, air toxics, and greenhouse gas. Encourage policies and actions that reduce emissions.
- ▶ Monitor, evaluate, and address wood heater impacts on air quality.
- ▶ Enforce air quality regulations that support human health.
- ▶ Promote reduced vehicle idling time.
- ▶ Maintain consistency with California vehicle emissions standards and electrification goals.

Climate Change

- ▶ Lead and support interagency work groups for climate change, land use, transportation, and energy issues that are crosscutting and where impacts and solutions have a significant impact on public health and equity, including chairing the Inter-Agency Advisory Board to the Climate Action Office.
- ▶ Finalize and implement the Resilience Implementation Strategy which will prioritize state action around climate resilience and adaptation programs and initiatives.
- ▶ Coordinate with the Department of Health Climate & Health Program on climate change mitigation, resilience, adaptation, and communication activities.

Fish and Wildlife

- ▶ Conduct statewide outdoor education and mandatory training opportunities that support health and well-being by encouraging outdoor recreation, immersion in nature, and the consumption of sustainably harvested fish and wildlife.
- ▶ Administer rules and regulations that encourage the public use and enjoyment of fish and wildlife and their habitats.
- ▶ Consider wildlife-vehicle collisions in the establishment of wildlife population goals, and work with the Agency of Transportation to identify and address problem areas on state roads with the placement of wildlife passages and other mitigation efforts.
- ▶ Consider rabies and other wildlife-transmitted diseases in the establishment of wildlife population goals, and ensure that management, primarily through regulated trapping, addresses disease concerns.
- ▶ Prioritize the importance of public safety-related activities in State Game Warden job duties.
- ▶ Emphasize outdoor recreation and access in the management and acquisition of department lands and access areas.
- ▶ Prioritize communications for laws, regulations, and program opportunities to people who speak languages other than English.
- ▶ Provide access to programming through effective communication techniques for communities often underrepresented in fish and wildlife related activities (e.g., Women in the Outdoors, Access the Outdoors, New American fishing clinics).

Program

Sustainability

- ▶ Promote the development of sustainable communities and the associated health benefits through partnerships, training, tools, and community engagement.
- ▶ The Agency's Civil Rights and Environmental Justice Unit implements the 2022 Vermont Environmental Justice Law (Act 154) through language access (iSpeak cards and translations services) and other equity-based programs.

Forests, Parks, and Recreation

- ▶ Steward and invest funds through the Clean Water Act and the Clean Water Board to support and supplement conservation and water quality focused programming and technical assistance.
- ▶ Administer programs that support healthy forests to maintain and enhance Vermont's working landscape, provide clean air and water, and support widespread recreational uses that draw Vermonters and visitors into forests.
- ▶ Administer programs that encourage the use of state forests and parks (e.g., free entrance and the ParkRx pass program).
- ▶ Expand the ParkRx pass program to encourage the use of state forests and parks, and recreation areas to improve mental and physical health.
- ▶ Promote the use of state forests, parks, and recreational places and their benefits to health through educational and promotional activities.
- ▶ Identify and support the development of parks, gardens, green open space, and tree canopy especially in areas of the state and communities of greatest need. Raise awareness about the health benefits of trees, target efforts toward underserved communities, and promote green streets.
- ▶ Partner with regional planning commissions, municipalities, land trusts and other conservation partners to improve access, awareness, and amenities at non-state parks and recreation sites, particularly in underserved and high-risk communities.
- ▶ Encourage the use of park trails and health workbooks (a tool for planners, parks and recreational professionals, and health practitioners) to help create and maintain parks and trails that benefit public health and provide equitable access.
- ▶ Address safety issues and concerns such as crime, vandalism, and proper management in trails, parks, and other Agency owned land. Work across

agencies to address safety issues (e.g., Game Wardens, VTrans, Vermont State Police).

- ▶ Provide adequate physical access to state parks for everyone, regardless of user ability. Parks should meet or exceed ADA standards.
- ▶ Provide infrastructure within state parks that encourages physical activity such as ball fields (volleyball, basketball), fitness stations, skate parks, and open areas for running and unstructured play as well as amenities that are conducive to social gatherings.
- ▶ Support worker safety and protection for forest economy workers.

Water and Waste

- ▶ Provide technical and financial assistance to improve water quality (e.g., reduced nutrient, sediment and other pollutant loadings to surface waters from agricultural and developed lands).
- ▶ Implement and fund clean water and site remediation programs and provide tools (maps and trainings) to assist regions and municipalities in water management and protection, and in site management.
- ▶ Implement and fund programs to assist underserved and vulnerable populations repair or replace failed drinking and wastewater systems.
- ▶ Administer regulatory programs that implement environmental and human health standards within authorizations and permits.
- ▶ Support Brownfields Economic Revitalization Alliance work to restore prior contaminated sites to useful green or developed spaces.
- ▶ Ensure collection of regular tap water testing and publicize results to make water quality results more transparent and publicly accessible.
- ▶ Maintain testing and remediation for lead in drinking water and PCBs in indoor air.

Air Quality

- ▶ Monitor air quality across the state and provide air quality forecasts and alerts to notify the public of poor air quality days.
- ▶ Support use of low-emissions vehicles and zero-emissions vehicles.

Climate Change

- ▶ Capture and provide information on climate change and associated trends (e.g., in the form of dashboards) to increase understanding about the health impacts of climate as well as strategies and actions for adaptation and mitigation.
- ▶ Provide information and tools on climate science and solutions that are accessible and relevant for various stakeholders.
- ▶ Conduct ongoing community and public engagement targeted at frontline and impacted communities to discuss climate change impacts on their communities, including the health impacts.

Fish and Wildlife

- ▶ Provide input on development projects through regulatory programs aimed at preserving fish and wildlife habitat (and, in turn, outdoor and nature-related recreation) and reducing forest fragmentation, a key factor in Lyme disease.
- ▶ Conduct youth and adult hunting, fishing, and trapping education programs that emphasize health benefits and address safety issues related to recreational use of fish and wildlife resources.
- ▶ Support Natural Heritage Program activities that promote non-hunting and fishing related public uses in the outdoors.
- ▶ Partner with United States Fish and Wildlife Service, United States Department of Agriculture Animal and Plant Health Inspection Service Wildlife Services, and other organizations with wildlife disease surveillance and research.
- ▶ Work with the Department of Health to educate people about wildlife-related diseases that pose a threat to humans, including tickborne illnesses.
- ▶ Improve access to fishing among English Secondary Language and Non-English communities through activities such as informational signs that include translated videos and infographics.
- ▶ Expand access to communities that are often underrepresented in fish and wildlife activities and programs.