

Appendix D: Environmental Justice – Benefits & Burdens Analysis

Statutory Basis

The Vermont Environmental Justice Law (Act 154 of 2022, codified at 3 V.S.A. Chapter 72) establishes the State’s policy that no segment of the Vermont population should, because of its racial, cultural, or economic makeup, bear a disproportionate share of environmental burdens or be denied an equitable share of environmental benefits. The law further requires that all individuals have meaningful opportunity to participate in environmental decision-making.

Pursuant to 24 V.S.A. §4348a and 24 V.S.A. §4345a, regional planning commissions must assess the distribution of environmental benefits and burdens as defined under the Environmental Justice Law, with particular attention to disproportionate impacts on environmental justice focus populations. This appendix fulfills that requirement for the Lamoille County Regional Plan and will be submitted to the Vermont Land Use Review Board as part of the Regional Plan compliance determination under 24 V.S.A. §4348.

Key Definitions Under State Law

The following definitions, established in 3 V.S.A. §6002, apply throughout this analysis:

Environmental Benefits	Assets and services that enhance the capability of communities and individuals to function and flourish in society (3 V.S.A. §6002).
Environmental Burdens	Any significant impact to clean air, water, and land, including destruction, damage, or impairment of natural resources resulting from intentional or reasonably foreseeable causes (3 V.S.A. §6002).
Environmental Justice Focus Populations	Any Census Block Group in which: (1) the annual median household income is not more than 80% of the State median household income; (2) persons of color and Indigenous peoples comprise 6% or more of the population; or (3) 1% or more of households have limited English proficiency (3 V.S.A. §6002).
Meaningful Participation	The opportunity for all individuals to participate in energy, climate change, and environmental decision-making, including integrating diverse knowledge systems and ensuring

communities are enabled and administratively assisted to participate fully (3 V.S.A. §6002).

From a definition standpoint, Environmental Justice and Health Equity aim to achieve the same equitable outcomes. These important planning terms are defined below and are an integral part of all LCPC's planning efforts. As described in the Regional Plan Introduction, these concepts are woven throughout the Regional Plan content, policies, and action items. During the 2023 update of the Regional Plan the LCPC also worked closely with the Belonging and Inclusion Committee (an LCPC advisory Committee) to conduct an equity review of the Regional Plan. Prior to the 2023 Regional Plan update the LCPC served as the lead Regional Planning Commission in development of the [Health Equity Planning Toolkit](#). While working collaboratively with other RPCs and state/regional health partners, the development of the Health Equity Toolkit played a role in further emphasizing concepts of Health Equity in the 2023 Regional Plan update. Development of the Toolkit was funded by a grant through the Vermont Department of Health. The Health Equity Grant also funded various community engagement and municipal planning projects across the State of Vermont lead by the 11 Vermont Regional Planning Commissions. In Lamoille County, from 2022-2024 the LCPC conducted outreach around Health Equity to priority populations using a variety of methods to inform the development of the Health Equity Planning Toolkit, the Regional Plan update, and Municipal Plan updates for the Towns of Cambridge, Elmore, Hyde Park, and Wolcott. Outreach methods conducted by LCPC under the Health Equity Grant included the following:

- Conducted a Health Equity Survey distributed to Lamoille County municipalities and health partners via email and community members via Front Porch Forum
- Conducted a community health assessment survey and tabling at the Wolcott Annual Community Barbecue
- Conducted a Walking Audit in Wolcott Village
- Conducted a health equity survey to inform recreation/community green space planning efforts for the new Elmore Town Garage property
- Direct outreach to the Lamoille Area Racial Equity Alliance
- Direct outreach to Vermont State University-Johnson Campus support group for new African American students
- Outreach to health partners working with priority populations including the local Health District Office, Lamoille Health Partners, and Healthy Lamoille Valley

- Public meetings with local Planning Commissions/ Selectboards in rural communities
- Held Regional Plan update information sessions
- Held Regional Health Equity trainings
- Front Porch Forum (online community forum postings)
- Regional Plan update flyer distribution in public spaces and local grocery/hardware stores

Environmental Justice/ Heath Equity Focus Populations reached during both 2023 and more recent outreach for the 2026 Regional Plan update are referenced in the “Environmental Justice Focus Populations” section below. Outreach for the 2026 Regional Plan update is detailed in the Introduction of the Regional Plan. More recent outreach has emphasized direct outreach to focus populations for flood recovery, including working with populations vulnerable to flooding through LCPC’s work with the Lamoille Area Recovery Network. This collective outreach and extensive survey data gathered during the distribution of the 2025 Regional Plan Survey (see Appendix B) helped shape policies and action items throughout the 2026 update of the Lamoille County Regional Plan.

Term	Definition
Environmental Justice	Vermont Act 154 defines Environmental Justice as all individuals are afforded equitable access to and distribution of environmental benefits, equitable distribution of environmental burdens, and fair and equitable treatment and meaningful participation in decisionmaking processes, including the development, implementation, and enforcement of environmental laws, regulations, and policies. Environmental justice recognizes the particular needs of individuals of every race, color, income, class, ability status, gender identity, sexual orientation, national origin, ethnicity or ancestry, religious belief, or English language proficiency level.

	<p>Environmental justice redresses structural and institutional racism, colonialism, and other systems of oppression that result in the marginalization, degradation, disinvestment, and neglect of Black, Indigenous, and Persons of Color. Environmental justice requires providing a proportional amount of resources for community revitalization, ecological restoration, resilience planning, and a just recovery to communities most affected by environmental burdens and natural disasters.</p>
<p>Health Equity</p>	<p>The Center for Disease Control (CDC) states: Health equity is the state in which everyone has a fair and just opportunity to attain their highest level of health. Achieving this requires ongoing societal efforts to address historical and contemporary injustices, overcome economic, social, and other obstacles to health and health care, and eliminate preventable health disparities.</p>

See table of underrepresented groups/ focus populations in the “Environmental Justice Focus Population” section below. This table also highlights the priority populations the LCPC reached during both the 2023 Health Equity Grant and Regional Plan update and during the 2025-2026 Regional Plan update public engagement and outreach efforts.

Purpose of This Analysis

This appendix fulfills the requirements of 24 V.S.A. §4348a by:

1. Identifying environmental benefits that affect communities within Lamoille County;
2. Identifying environmental burdens that affect communities within Lamoille County;

3. Evaluating whether benefits and burdens are equitably distributed across the Region; and
4. Recommending implementation strategies to avoid and mitigate disproportionate impacts on Environmental Justice focus populations.

Analytical Approach and Methodology

Vermont Statute (24 V.S.A. §4345a) identifies 36 examples of environmental benefits and burdens. LCPC's analysis assesses those most relevant to regional planning decisions and land use in Lamoille County. This analysis focuses on identifying existing conditions, ensuring the Plan does not worsen those conditions, and identifies opportunities to mitigate environmental burdens wherever feasible.

Geographic Unit of Analysis

LCPC conducted its analysis at the town level and for U.S. Census Designated Places (CDPs) rather than relying solely on Census Block Group data. This approach better reflects conditions in Lamoille County for two reasons:

- In rural areas, Census Block Groups can span multiple towns with substantially different income levels and demographics and may obscure environmental burdens in some communities. Further, town-level data aligns with Vermont's municipal planning framework, where most local land use decisions are made.
- CDPs represent locally recognized unincorporated communities with distinct population concentrations that differ from surrounding rural areas in factors central to Environmental Justice analysis—including income, housing age, and infrastructure adequacy.

Where town-level data understates conditions in village areas, the CDP-level analysis is used to inform findings and policy recommendations. Both geographies are referenced in the findings below. See Environmental Justice Focus Population Maps at the end of this Appendix.

Environmental Justice Focus Populations

LCPC mapped Environmental Justice focus populations using the statutory definition in 3 V.S.A. §6002. Because the rural character of Lamoille County results in lower overall concentrations of persons of color or Indigenous peoples at the Census Block Group level, *LCPC supplemented its mapping with income-based and housing cost burden data to ensure that economically vulnerable populations are considered in the environmental justice policy making framework.* This approach is consistent with the analytical adjustments made by other Vermont regional planning commissions.

Environmental Justice/ Health Equity Focus Populations	
X = Populations reached during Health Equity Grant outreach, and Regional Plan update public engagement during the 2023 and 2026 Plan update.	
Persons of color and Indigenous peoples	X
LGBTQ+ community	X
Low-income households	X
Rural communities	X
Households with limited English proficiency	
Migrant workers	X
People experiencing homelessness	X
People living with a disability	X

Findings: Environmental Benefits & Burdens

A. Environmental Benefits

Lamoille County possesses significant and broadly distributed environmental assets:

- More than 80% of the Region’s land area is conserved by State, local, or nonprofit organizations or enrolled in Vermont’s Current Use Program, protecting air and water quality and providing land for passive recreation.
- Extensive State Forests, State Parks, and town-owned lands provide publicly accessible recreational opportunities.

- Protection of forestland and floodplains enhances natural flood water attenuation and benefits downstream communities throughout the Region.

However, these benefits are not equitably distributed. Fee-based recreational access limits use by lower-income households. The same high concentration of conserved land that provides ecological benefits constrains the land available for housing development and infrastructure investment, creating indirect burdens for residents with fewer economic choices.

B. Environmental Burdens

The following environmental burdens were identified through LCPC’s analysis. Burdens are presented by topic area. These findings are expanded upon in the Environmental Justice Focus Population Maps section at the end of this Appendix.

Factor	Key Findings
Housing Stock Age & Hazardous Materials	Median housing age exceeds 48 years in Morrisville, Waterville, Hyde Park, Wolcott, and Stowe, indicating elevated risk of lead paint and PCB exposure (banned 1978–79). Cambridge, Johnson, Elmore, and Eden have median ages suggesting potential asbestos exposure (restricted beginning 1989). Belvidere is the only town with median housing age under 37 years; however, its proximity to the Eden asbestos mine warrants continued monitoring.
Geographic Distribution of Low-to-Moderate Income (LMI) Populations	At the town level, only Eden has 50% or more LMI population. At the CDP level, Jeffersonville Village, Johnson Village, North Hyde Park CDP, and Wolcott CDP each have LMI populations of 50% or greater. Town-level data alone understates economic need in village areas and creates barriers to accessing income-based infrastructure funding.
Housing Cost Burden	In all Lamoille County communities except Hyde Park, at least 10% of households are severely cost-burdened (paying more than 50% of income on housing). In Stowe and Cambridge, 35% or more of households are cost-burdened. At the CDP level, Cambridge Village, Jeffersonville Village, Johnson Village, Wolcott CDP, and

	<p>Hyde Park Village CDP all show 40% or more of households experiencing cost burden—substantially higher than town-level figures. As communities lose housing through the buy-out process in the floodplain, rural communities in Lamoille County are facing an increase in local tax burden and a continued financial strain on limited, aging housing stock.</p>
<p>Flood Risk</p>	<p>The Region faces significant flood risk exposure, particularly in and around river corridors. Many village centers—where lower-income populations are concentrated—are located within or adjacent to floodplains, creating disproportionate exposure to flood hazards and associated recovery costs.</p>
<p>Water & Wastewater Infrastructure</p>	<p>Aging and inadequate drinking water and wastewater infrastructure affects both public systems and private wells and septic systems throughout the Region. Communities with lower LMI thresholds based on town-level data face difficulty qualifying for income-based infrastructure funding despite significant CDP-level need.</p>
<p>Access to Recreation & Green Space</p>	<p>While extensive conserved land exists, equitable public access is uneven. Privately owned recreational amenities—including ski resorts—require fees. Residents in lower-income communities have less discretionary income to access these assets. Historically, brownfield sites and chemical based industries have been located in areas with marginalized populations and in Village and Downtown Centers. Brownfields remediation presents an opportunity to address this inequitable pattern and provide additional access to community green space in Downtown and Village Centers.</p>

Equity Assessment

Based on the analysis above, LCPC finds that several environmental burdens disproportionately affect Environmental Justice focus populations in Lamoille County:

- Hazardous building materials risk is concentrated in older housing stock located in the Region's most economically vulnerable communities.
- Housing cost burden is severe and widespread, with village CDPs—where lower-income households are concentrated—experiencing the most acute conditions.
- Flood risk disproportionately affects lower-income households in village centers who have fewer financial resources to invest in flood resilience or relocation.
- Infrastructure deficiencies in water and wastewater systems are concentrated in areas with demonstrated economic need, yet income-based funding mechanisms often fail to capture CDP-level poverty due to the use of town-level data.

LCPC acknowledges the limitations of this analysis. Census data can be unreliable at small geographic scales. Some benefits and burdens cannot be fully quantified with available data. This framework represents one approach to equity analysis; there may be additional burdens disproportionately affecting historically marginalized residents that are not fully captured by the statutory mapping framework.

Regional Plan Policies and Implementation Strategies

To reduce identified disparities and ensure the equitable distribution of benefits and mitigation of burdens, the Lamoille County Regional Plan includes the following implementation strategies:

Land Use and Conservation

- Prioritize conservation efforts that enhance flood mitigation and provide meaningful public access, including strategies that support dual goals such as conservation paired with housing or infrastructure siting.
- Support equitable public access to conserved lands while balancing the needs of diverse user groups, including lower-income residents and persons with disabilities.
- Direct new development to higher ground near village centers outside of floodplain areas, consistent with the Regional Plan Future Land Use Map.

Housing and Infrastructure

- Advocate for the use of CDP-level income and cost burden data in State and federal funding programs for drinking water, wastewater, and housing investment, to ensure that village-area need is accurately represented in program eligibility determinations.

- Support public and private investment in the existing housing stock, including hazardous materials abatement (lead, asbestos, PCBs), code improvements, HVAC modernization, and improved drinking water and wastewater systems.
- Prioritize infrastructure investment—water, wastewater, stormwater—in the Region’s village centers to enable housing development and support existing residents.

Flood Resilience

- Support the elevation, flood-proofing, or relocation of housing in flood hazard areas, with priority given to lower-income households with the least capacity to self-finance mitigation.
- Integrate flood risk equity considerations into municipal hazard mitigation plan updates and local floodplain management programs.

Meaningful Participation

- LCPC is committed to providing meaningful participation opportunities, as defined in 3 V.S.A. §6002, in all regional planning processes. This includes ensuring that outreach and engagement activities are accessible to all residents, with particular attention to Environmental Justice focus populations, including those with limited English proficiency or limited digital access.
- LCPC will coordinate with State agencies, municipalities, and community partners to ensure that implementation of Regional Plan policies reaches the communities with the greatest need.

Relationship to Land Use Review Board Compliance

This Environmental Justice analysis is a required element of the Lamoille County Regional Plan under 24 V.S.A. §4348a. LCPC will submit this chapter and the full Regional Plan to the Vermont Land Use Review Board (LURB) for a determination of compliance pursuant to 24 V.S.A. §4348(h). The analysis demonstrates conformance with the goals established in 24 V.S.A. §4302 and the plan elements required by 24 V.S.A. §4348a, including the equitable distribution of environmental benefits and burdens.

LCPC will update this analysis as part of each Regional Plan update cycle, incorporating new Census data, updated State Environmental Justice mapping tools developed by the Agency of Natural Resources pursuant to Act 154, and community input received through the plan adoption process.

Environmental Justice/ Focus Population Maps

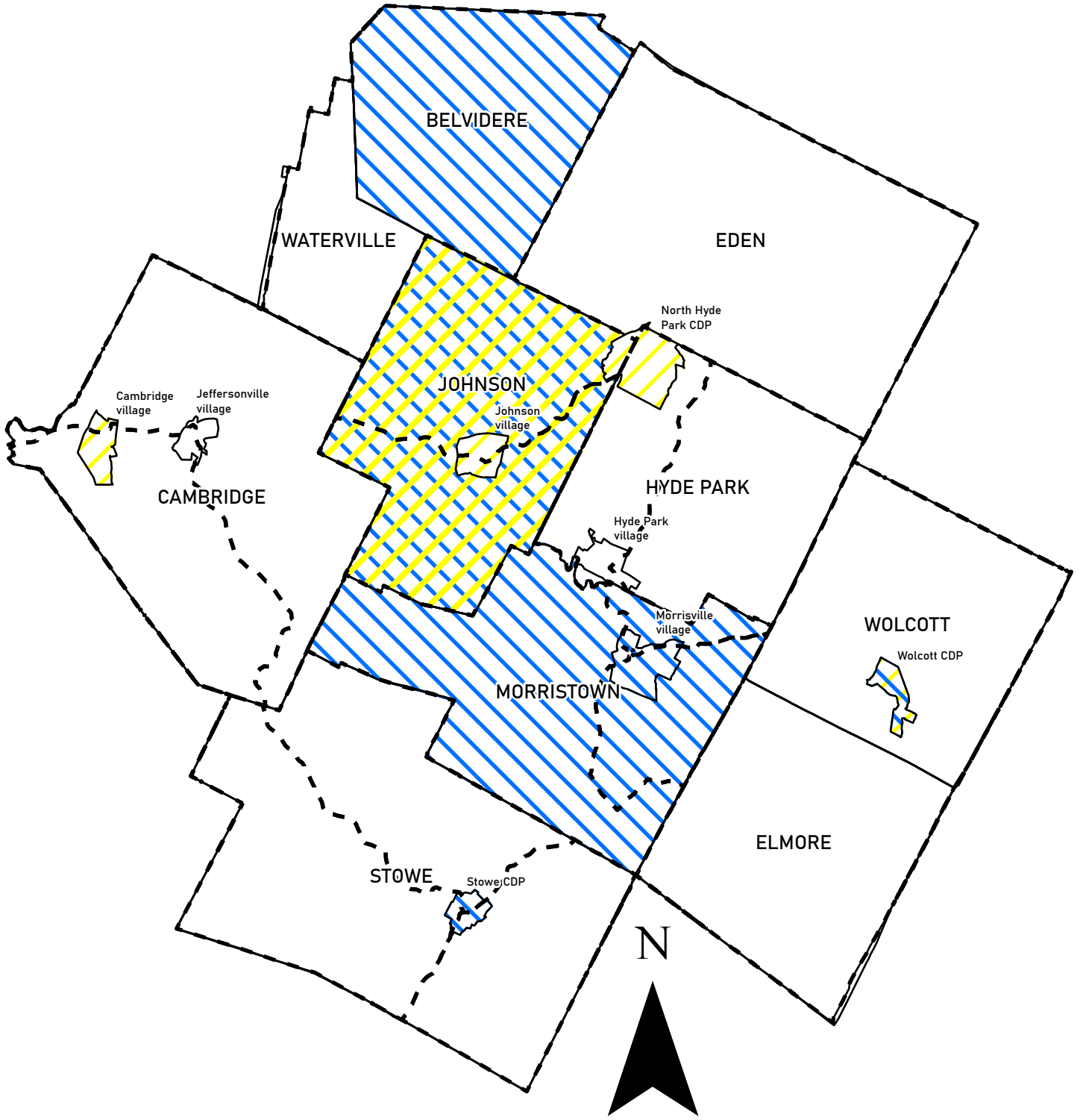
Map 1 Below, the Environmental Justice Focus Populations map, demonstrates both towns and Census Designated Places highlighting households with median income below 80% of the State median household income. The Town of Johnson falls in this category as well as Cambridge Village, Johnson Village, and North Hyde Park Village. This first map below also shows the communities of Belvidere, Johnson, Morristown, and the Stowe Downtown Center (Census Designated Place) is home to 10 percent or greater of people of color or those who are indigenous. As documented in map 1 below, Lamoille County does not have reported communities of one percent or greater of households with limited English proficiency.

Map 2 Below takes a different look at income disparities in Lamoille County. This map shows communities with over 50% of low to moderate income households as well as ageing housing stock. This map highlights the Census Designated Places which meet this low to moderate income category including the Villages of Jeffersonville, Johnson, North Hyde Park, and Wolcott. The Town of Eden also has 50% or greater low to moderate income households. The oldest housing stock (greater than 48 years old) in Lamoille County resides in the Towns of Morristown, Hyde Park, Stowe, and Waterville. Except for Belvidere, the remaining Lamoille County Towns (Cambridge, Eden, Elmore, Johnson, and Wolcott) still have an average age of housing stock from 37-48 years old.

Map 3 below focuses on housing cost burden. This map demonstrates that all towns in Lamoille County except for Hyde Park have greater than ten percent of homeowners/renters spending half of their income on housing costs. When referring to homeowners this includes second homeowners as well. This map highlights varying levels of cost burden including demonstrating the towns of Eden, Elmore, Hyde Park, and Morristown have greater than 30% of households that spend 1/3 or more of their income on housing costs. Towns represented as severely cost burdened (greater than 35% of homeowners/renters spending 1/3 or more on housing cost) include Cambridge and Stowe. Meanwhile, the Villages of Cambridge, Jeffersonville, Johnson, Hyde Park, and Wolcott (represented by Census Designated Places) are also cost burdened with 40% of homeowners/renters experiencing housing cost burden.

Environmental Justice Focus Populations

Lamoille County

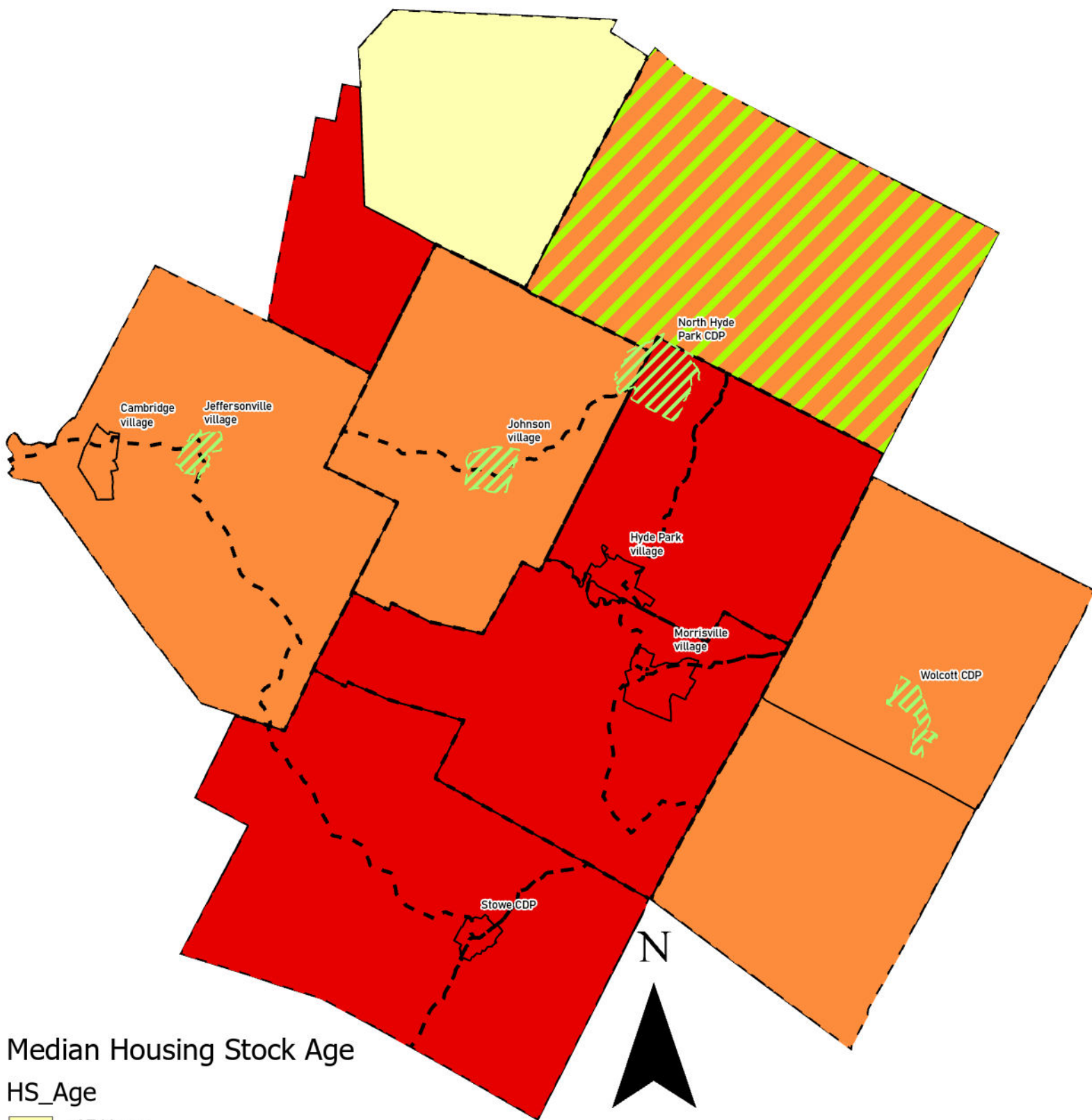


Legend

- Lamoille_Census Blocks
- Median Income Below 80% of State Median
- ≥10% People of Color or Indigenous
- ≥1% of Households with Limited English Proficiency


Sources:
U.S Census

Median Housing Stock Age and Income Levels Lamoille County




Median Housing Stock Age

HS_Age

 <37 Years

 37-48 Years

 >48 Years

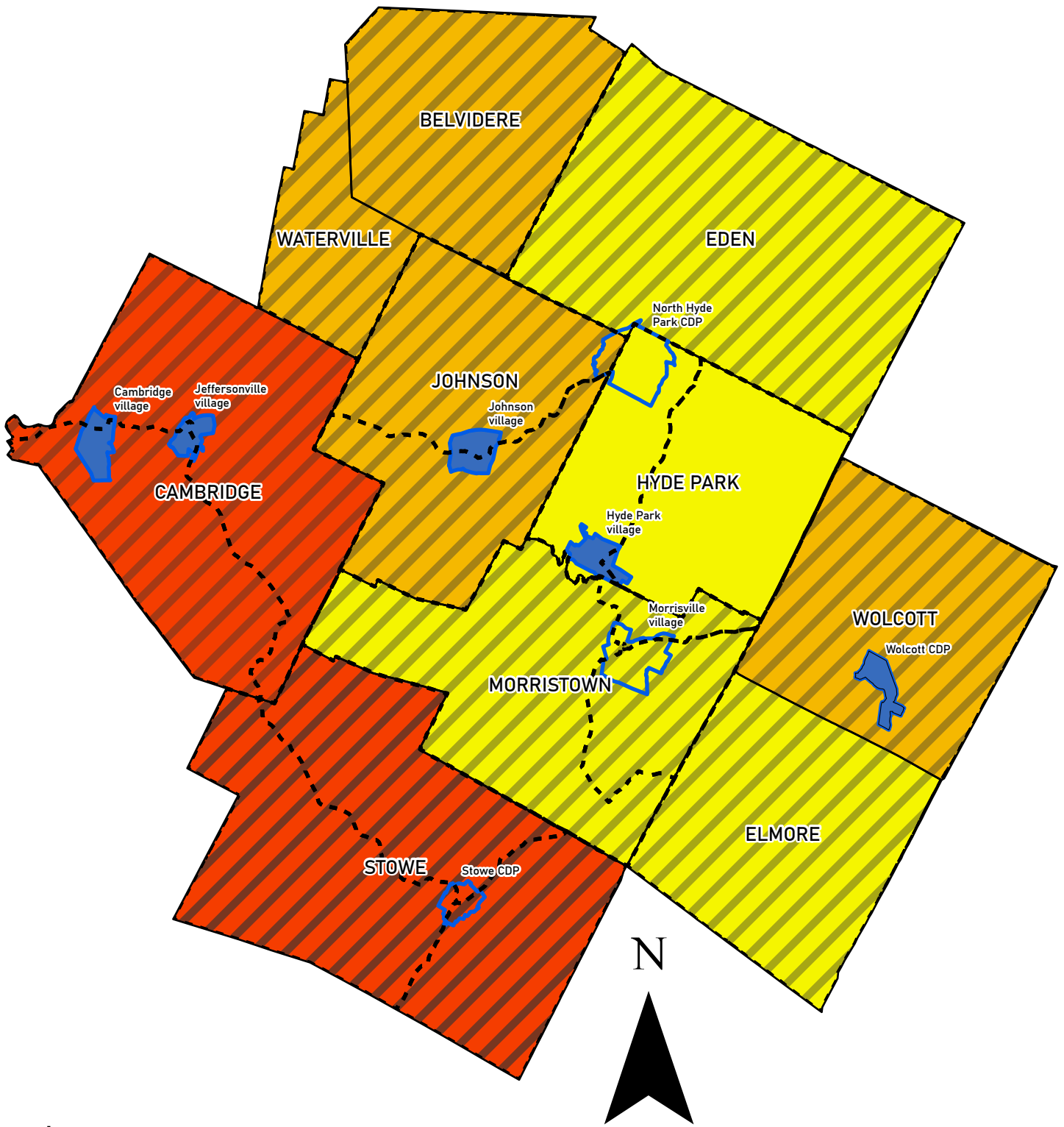
 Low to Moderate Income Population Above 50%

 Lamoille_Blocks








Sources:

Lamoille County/Hardwick Regional Housing Assessment, 2024
Vermont Housing Finance Agency, 2023

Housing Cost Burden in Lamoille County



Legend

-  Towns with >10% of Homeowners/Renters paying half of their income on Housing
-  <30% of Homeowners/Renters paying 1/3 or more of their income on housing
-  30% -35% of Homeowners/Renters paying 1/3 or more of their income on housing
-  >35% of Homeowners/Renters paying 1/3 or more of their income on housing
-  Census Designated Places
-  CDPs with 40% of Homeowners/Renters Experiencing Housing Cost Burdens
-  Census Blocks