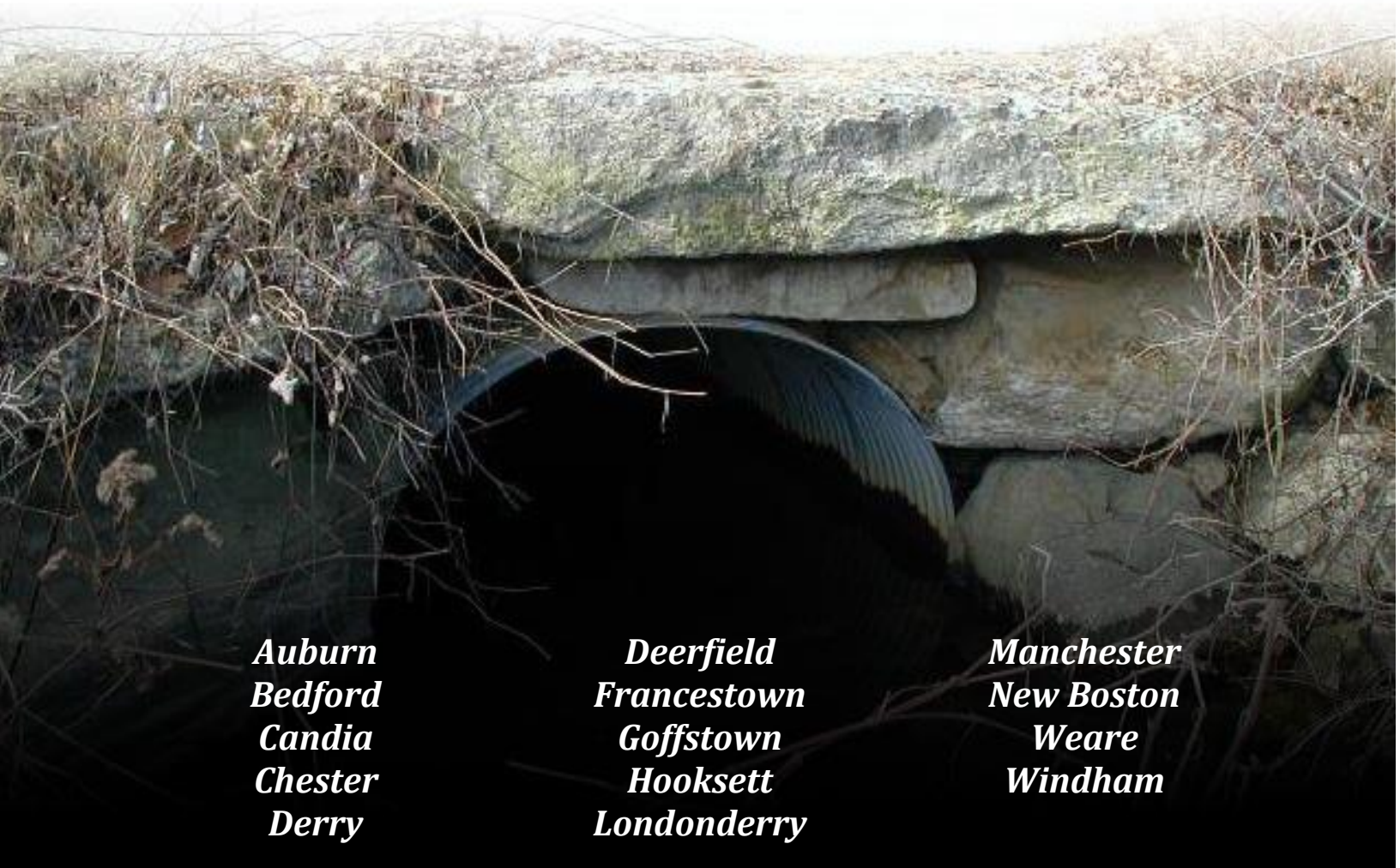
2020 Regional Vulnerability Assessment:

for the Southern New Hampshire Planning Commission

A DECISION-MAKING TOOL TO PLAN FOR A CHANGING CLIMATE



Auburn	*Deerfield*	*Manchester*
Bedford	*Francestown*	*New Boston*
Candia	*Goffstown*	*Weare*
Chester	*Hooksett*	*Windham*
Derry	*Londonderry*	

Public Comment Draft, April 13th 2020



U.S. Department of Transportation

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GLOSSARY OF ACRONYMS

AOP	Aquatic Organism Passage
C	Criticality
CMIP3	Coupled Model Intercomparison Project
CRS	Community Rating System
DEM	Digital Elevation Model
Esri	Environmental Systems Research Institute
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GC	Geomorphic Compatibility
GCM	General Circulation Models
GIS	Geographic Information System
HSEM	Homeland Security and Emergency Management
HUC	Hydrological Unit Code
MPO	Metropolitan Planning Organization
NHDES	New Hampshire Department of Environmental Services
NHDOT	New Hampshire Department of Transportation
NHGS	New Hampshire Geological Survey
NOAA	National Oceanic and Atmospheric Administration
NRCC	Northeast Regional Climate Center
SADES	Statewide Asset Data Exchange System
SI-UNH	Sustainability Institute at the University of New Hampshire
SNHPC	Southern New Hampshire Planning Commission
STAPLEE	Social, Technical, Administrative, Political, Legal, Economic, and Environmental factors
STR	Structure Condition
T2	Technology Transfer Center
USDOT	United States Department of Transportation

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EXECUTIVE SUMMARY

VULNERABILITY ASSESSMENT ACTIVITY

In September 2018, Southern New Hampshire Planning Commission (SNHPC) set out to analyze the risks to the road network associated with extreme weather within the SNHPC region. Historically, the most common and destructive type of risk to the region is inland flooding. Inland flooding is typically caused by heavy rainfall events. Over time, heavy rainfall events in have increased in frequency. Today, inland flooding continues to threaten damage to the region's road network.

This vulnerability assessment explores the risk posed to ***culverts and small bridges,*** which are referred to as "***stream crossings***" throughout the report. Vulnerability assessment activity included engagement of road agents and public works staff to identify risk factors and to consider potential adaptation and mitigation options.

In summary the vulnerability assessment project encompassed the following tasks:

- *Stakeholder outreach and engagement*
- *Empirical climate and asset data collection*
- *Scoring and prioritization of risk*
- *Identification of high-priority stream crossings*
- *Identification of possible impacts at crossings*
- *Adaptation and mitigation recommendations*

SNHPC staff and collaborators conducted these tasks with an intent to provide communities and regional agencies with a decision-making tool that can assist in selecting adaptation and mitigation strategies for stream crossings. The assessment used available data and resources to provide an online Stream Crossing GIS Map for the region. Communities can use this map to share information, increase coordination around emergency events, and consider their reliance on the road network.

As part of the process of understanding vulnerability issues, SNHPC staff sought guidance from staff at New Hampshire Geological Survey (NHGS) within New Hampshire Department of Environmental Services (NHDES). Communication identified inter-departmental coordination opportunities. NHGS provided direction and encouraged SNHPC staff to contribute to the statewide analysis of stream crossings already underway. NHGS staff also provided SNHPC with direction on gathering data from the Statewide Stream Crossing Map managed by the UNH Technology Transfer (T2) in the Statewide Asset Data Exchange System (SADES). Input from NHGS helped focus the work of the vulnerability assessment on improving local knowledge around the concepts of hydraulic vulnerability, geomorphic compatibility, and flooding impacts at stream crossings. This collaboration is reflected in the regional and local prioritization of stream crossings and through the documentation of high-priority stream crossings found in Appendix E of this report.

Observations of trends in weather patterns and a summary of projected climate change over the remainder of this century is also included in this report. The climate data in this report was sourced from National Oceanic and Atmospheric Administration's National Centers For Environmental Information, Cornell University via Precip.net, and the University of New Hampshire Sustainability Institute. The sourced climate data utilized two commonly referenced climate scenarios (high carbon emissions and low carbon emissions) from the Global Circulation Model. The climate scenarios project a range of possible climate outcomes over the remainder of the century. The Climate Projections section of the report highlights the dramatic changes in intensity and frequency of major rainfall events Southern New Hampshire can anticipate for the timespan between year 2020 and year 2099.

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Vulnerability Assessment Scale and Outcomes

Using available data, SNHPC identified 1,587 stream crossings within the SNHPC region with some level of documentation. Stream crossing data ranges from a complete documentation of field values according to the SADES protocol down to the acknowledgement of a crossing between a given road and stream yet to be collected in SADES. SNHPC estimates another 600 intersecting streams and roadways across the region have yet to be documented in either SADES or this vulnerability assessment.

Of the 1,587 stream crossings reviewed as part of this vulnerability assessment, the majority (1,086) were found to be in "Good" condition with the remainder having some level of deterioration or unknown status. This general state-of-good repair for stream crossings in the region is a reflection of the diligent maintenance efforts by local and regional asset managers.

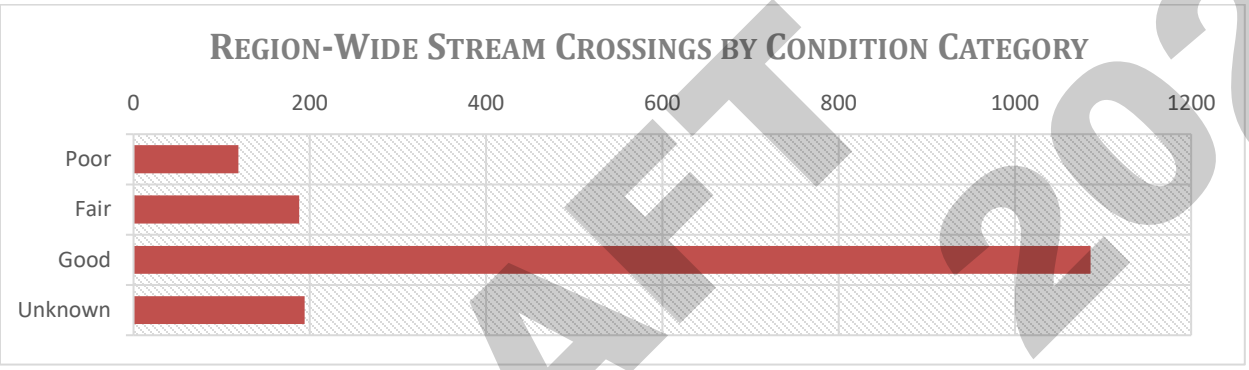


Figure 1: Region-Wide Stream Crossings by Condition Category

Of the 1,587 stream crossings across the region, only 300 of them exist on roadways which see traffic volumes greater than 10,000 vehicles per day. The majority of stream crossings exist on roads averaging less than 1,000 cars per day. In the case of a major flooding impacting stream crossings, the low number of high-volume roads provides the opportunity for a targeted response for restoring travel on these high-volume roadways in case of a major inland flooding event.

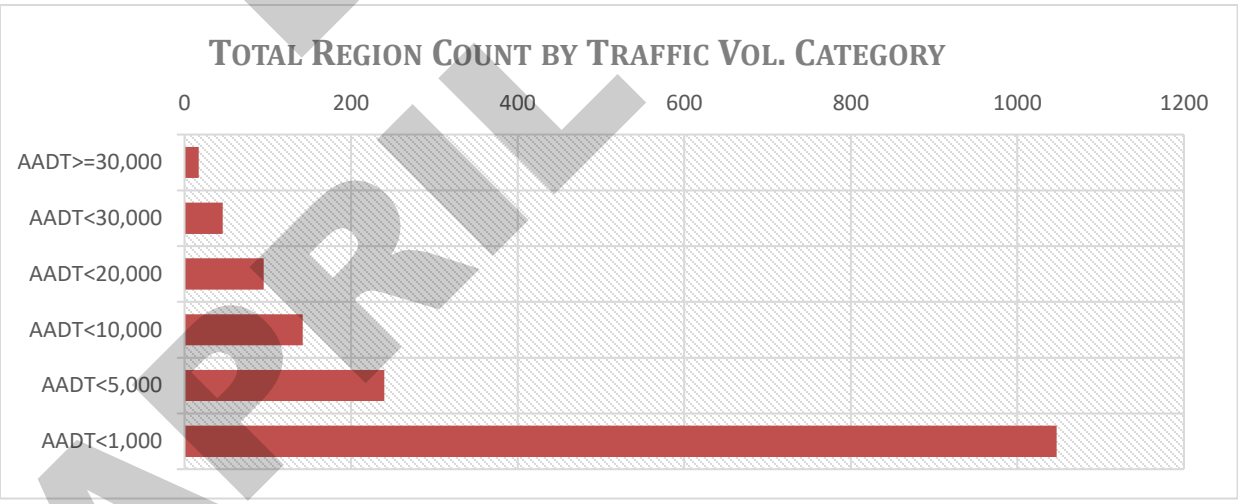


Figure 2: Region-Wide Stream Crossings by Traffic Volume Category

Municipalities in the region have undertaken various levels of planning to address and identify vulnerability of high priority stream crossings. Yet, local asset managers still expressed a desire to

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adopt a broader scale assessment methodology into their decision-making, their existing maintenance activities, and as a resource to supplement documentation for stream crossing capital investment requests. The result was the creation of a methodology for prioritization of stream crossings utilizing existing data and input from municipal staff.

Details about the criterion for prioritization are found in the Stream Crossing Prioritization section of this report. Prioritization results were documented both region-wide and individually for each municipality. Statistical data, prioritization results, and high-priority stream crossings for each municipality are in Appendix E: Scoring Summary and Detail Sheets at the end of the report.

The work of this vulnerability assessment increased coordination and communication among relevant agencies. Assessment activities sought to build new opportunities for coordination of state and local agencies in anticipation of future emergency events. The work also considered impacts of increased frequency and intensity of precipitation on the function of the road network. By working together to address infrastructure vulnerabilities, the region can improve the ability to mitigate the occurrence of stream crossing failures brought about by more intense rainfall events.

RECOMMENDATIONS FOR ADAPTATION AND MITIGATION

Literature review, asset and climate data research, local interviews, and the findings of the prioritization model provide a well-rounded body of research and analysis including a foundation for making recommendations for action.

Recommendations for action to mitigate and adapt to known vulnerabilities include:

- *Improve access and function of stream crossing inventory maps and data.*
- *Increase coordination between NHDOT and local public works departments.*
- *Revisit local, regional, and state funding mechanisms to prioritize at-risk stream crossings.*
- *Include vulnerability assessment information in municipal Hazard Mitigation plans.*
- *Implement mitigation efforts before climate change is projected to accelerate.*

At the request of the region's municipalities, SNHPC developed an online map of prioritized stream crossings including a filter function to limit data by municipality, crossing ownership (state, local, private, or unknown), and stream crossing size (upstream horizontal open width measured in feet). The online map includes a video tutorial to illustrate the filter functions and how to switch between the ownership and prioritization layers. The online inventory and scoring of stream crossings were made available to communities and the public at-large in the spring of 2020. SNHPC also conducted field assessments to fill in gaps in data for high priority stream crossings. SNHPC will continue field assessments in support of NHGS during the summer of 2020 and in future years to improve the completeness of the region's stream crossing inventory in SADES.

To build support for adaptation and mitigation across different levels of government, SNHPC will work with stakeholders in developing outreach activities. It is the Commission's goal to ensure community leaders across the region are aware of the risks posed to public roads and stream crossings by increased frequency and intensity of rainfall events. With the resources presented in this report, SNHPC will illustrate available data on the existing conditions of stream crossings, the risks associated with those crossings, and criteria used to determine the level of risk posed to the road network. Public awareness activities will engage local stakeholders and state partners in efforts to improve the resiliency of the region's road network.

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VULNERABILITY ASSESSMENTS – WHY NOW?

WHY IS THIS WORK SO IMPORTANT NOW AND WHAT ARE THE COSTS OF DISRUPTION?

Inland flooding associated with major rainfall is the most common weather event threatening Southern New Hampshire's infrastructure and property. Figure 3 illustrates the U.S. observed increase in the frequency and intensity of heavy rainfall that threatens damage and disruption to the region's transportation network (including roadways, culverts, and bridges,). Depending on the season and other weather impacts, such as heavy winds, these impacts can be even more intense. Implementing repairs in emergency conditions carries a high price tag and places unanticipated strain on state and local budgets. Through strategic planning and agency cooperation, communities can implement infrastructure improvements that will save money, reduce disruption, and ensure continued services despite predicted future events.

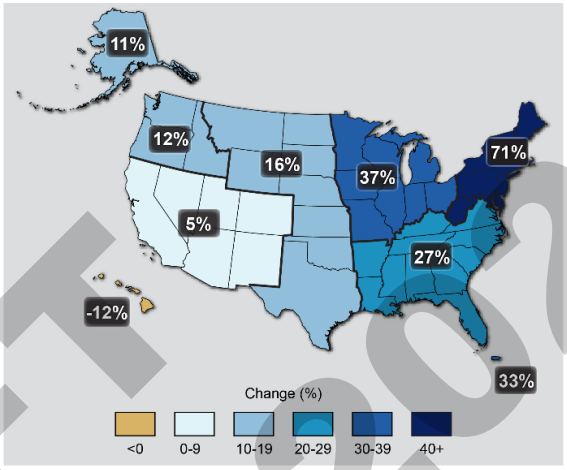


Figure 3: Observed Increase in Very Heavy Precipitation*

Over the last 25 years, New England has averaged approximately four major disasters per year (presidential and state declarations combined) and nine out of ten of these disasters were caused by flooding. Figure 4 illustrates the increased frequency and cost these disasters are having on the State. Southern New Hampshire has experienced the damaging effects of these extreme weather events firsthand. In 2006 and 2007, Southern New Hampshire experienced two major inland flooding events which resulted in significant damage to homes and property. During the May 2006 flooding, commonly known as the Mother's Day Floods, over 600 roads were closed statewide. The 2006 Mother's Day Flood (Disaster Declaration DR-1643), resulted in FEMA disbursing nearly $9 million dollars in direct assistance to over 4,400 households and over $14 million dollars in public assistance to state and local government. These impacts illustrate the scale of risk that extreme precipitation carries and the potential for it to inflict damage on Southern New Hampshire. The magnitude of risk the region faces supports the need for proactive planning for future events and the value of proactive risk mitigation.

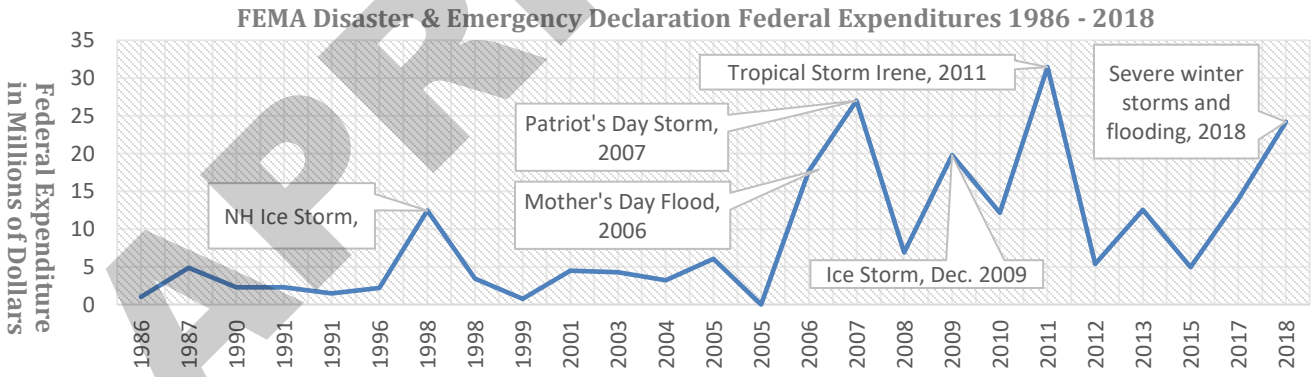


Figure 4: FEMA Disaster & Emergency Declaration, Federal Expenditures 1986-2018

*** Note: Observation time range for Figure 3 is 1958 to 2012. Very Heavy Precipitation is defined as the heaviest 1% of all daily events. Figure sourced from the Climate Change Impacts in the United States: The Third National Climate Assessment report. Figure updated from Karl et al. 2009**

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BACKGROUND

PROJECT SELECTION

In 2016, the United States Department of Transportation (USDOT) and Federal Transit Administration (FTA) via the Federal Highway Administration (FHWA) sent a letter to the New Hampshire Department of Transportation (NHDOT) Commissioner and the state's four Metropolitan Planning Organizations (MPOs). The letter identified "Planning Areas of Emphasis" for the 2018-2019 Unified Planning Work Program. Among the areas of emphasis was an acknowledgement that "climate change mitigation and adaptation discussions […] can improve planning and project-level decision-making, reduce vulnerability from legal challenges to the National Environmental Policy Act process, and foster cooperation among transportation, resource and land use agencies". The letter identified conducting regional vulnerability risk assessments of transportation assets as an example of how this area of emphasis could be satisfied. As a result, Southern New Hampshire Planning Commission (SNHPC) included the task of conducting a vulnerability assessment in its 2018-2019 Unified Planning Work Program.

Prior to the 2016 letter from USDOT, FHWA had issued a directive via "Order 5520" which established policy on preparedness and resilience to climate change and extreme weather events. From this order FHWA developed a pilot program to create model documents for conducting vulnerability risk assessments. To summarize the work done under the pilot program, the FHWA Office of Planning, Environment, and Realty released the "Vulnerability Assessment and Adaptation Framework, Third Edition" in December 2017 as a guide to organizations conducting vulnerability assessments. The Vulnerability Assessment and Adaptation Framework outlines methods for articulating scope, obtaining data, assessing risk, prioritizing adaptation/mitigation options, and for incorporating assessment results. This framework document was utilized as a primary template for the layout of much of the content in this vulnerability assessment report.

PROJECT SCOPE & OBJECTIVES

This report documents the assessment of risk and impacts specific to stream crossings in the SNHPC region. For the purpose of this report, these ***culverts*** and ***small bridges*** (those less than 20' in span) are labelled together as "***stream crossings***", a term consistent with NHDES terminology. *

> *As an aside, this assessment does not address other types of stream infrastructure such as dams, levees, retaining structures, or larger bridges which have their own unique risk characteristics. Other entities such as NHGS are actively exploring these additional areas of study to better understand the potential to measure their risk factors.*

The FHWA's adaptation framework for vulnerability assessments calls for measurement of climate change as a factor of vulnerability. The SNHPC vulnerability assessment follows FHWA's adaptation framework by defining the criticality of stream crossings to the road network and evaluating the risk factors. While FHWA's framework is used to guide SNHPC's work on the vulnerability assessment, SNHPC's assessment activity did not directly estimate the impact of future climate

*** Note: The data available for analysis included some exceptions to the stream crossing as a category. For example, some bridges crossing the Merrimack River will show up in the maps provided in this assessment but exceed the criteria for analysis.**

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scenarios on the road network. Ongoing efforts of NHGS to document the hydraulic capacity of stream crossings throughout the State may provide a data source to measure impacts of climate change. It is hoped that as NHGS hydraulic modeling matures, documentation of hydraulic capacity of individual stream crossings will provide data point capable of projecting the impacts that more intense rainfall will have on stream crossings under alternative climate scenarios.

In keeping with FHWA's Assessment Framework, this vulnerability assessment identifies elements of stream crossings that are impacted by weather (extreme precipitation) and assigns a score for their vulnerability based on currently available data which can estimate risk and magnitude. The results of the vulnerability assessment provide municipalities and stakeholder agencies with an additional decision-making tool to assist with the selection of adaptation and mitigation strategies.

Relative to these goals and objectives, the following tasks were completed within the scope of work:

- *Relationship building with state and local asset managers*
- *Stakeholder outreach & engagement*
- *Empirical climate & asset data collection*
- *Exploration of hydraulic vulnerability*
- *Staff discussion of potential impacts at select sites*
- *Stream crossing vulnerability scoring and priority*
- *Recommendations for mitigation and adaptation*

The above tasks, as well as their reasoning and methods, are detailed in their respective sections of this report. The methods used to evaluate risk of flooding utilized relevant past work completed both regionally and statewide. NHGS, in conjunction with the State Stream Crossing Steering Team has developed years of cumulative analysis and data on the impact runoff can cause to our state's transportation infrastructure.

The work of this assessment is also intended to encourage increased coordination and communication among relevant agencies. Where possible, the stakeholder engagement and participation process provided a portal from which municipal staff gained knowledge of available resources for addressing infrastructure needs through existing state agency work. This process was used to foster partnerships around identified common concerns, addressed risk, increased awareness, and promoted funding resources available for mitigation. SNHPC leveraged existing data on stream crossing location and ownership to facilitate collaboration between local officials and state agencies. This collaboration also influenced the development of criteria and risk factors for the stream crossing prioritization model in this assessment. Not only does this assessment identify and prioritize stream crossings relative to risk, but it also creates a framework to share information, increase coordination around emergency events, and considers impacts of extreme precipitation on other system types which rely on the daily function of the road network.

Motivation to Conduct a Vulnerability Assessment

This assessment is motivated by the need to anticipate ways more frequent and more intense rainfall events will impact infrastructure and identify actions that can be taken to prepare for such conditions. One of the most memorable events of this century was in 2006, well known as the "Mother's Day Flood". During that storm, rainfall totals reached up to 11" across portions of southern New Hampshire over a seven-day period*. The rain event resulted in widespread flooding of streams and rivers throughout the region. Flooding overtopped roads and washed out culverts, rendering them impassable and cutting off access to homes and businesses. Statewide, the flooding resulted in hundreds of millions of dollars in damage to roadway infrastructure. While the Mother's

*** Note: Weather data from the USGS "Flood of May 2006 in New Hampshire" Open-File Report 2007-1122 available at: https://pubs.usgs.gov/of/2007/1122/pdf/OFR2007-1122.pdf**

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Day Flood was an exceptional event, it is not an isolated incident. Over the last century, New Hampshire has become wetter and rain events more intense. Between 1970 to 2012, annual precipitation in Southern New Hampshire has increased between 12% and 20%. * Today, there is general acknowledgement that the region is becoming more prone to intense rainfall events. These heavy rains impact watersheds in a variety of ways, including flooding and elevated storm water runoff. More frequent, prolonged, or elevated storm water runoff flows can tax stream crossing infrastructure through downstream bank erosion and stream bed scouring. Elevated stream flow can overwhelm stream crossings as the flow can become restricted by inlet obstruction, resulting in overtopping of roadways. The most severe events result in a wash out of stream crossings. This loss of road network connectivity results in detours and reductions in trips.

Vulnerability Assessment Audience and Utility

The information in this vulnerability assessment is intended to equip transportation and emergency managers with data about the variability of risk associated with stream crossings based on factors such as infrastructure condition, intensity of vehicular use, location, and flooding history. Documented stream crossings are assigned a score based on the risk factors. The prioritization of stream crossings provides ***road agents and municipal public works staff***, collectively referred to this report as ***asset managers***, with useful information to help them educate town staff and elected officials of the risks associated with extreme precipitation events. Municipalities can use this information to weigh capital expenditures on stream crossings against budgetary constraints and other competing fiscal priorities. In general, stream crossing prioritization scoring, along with online mapping, provide new decision-making tools for municipalities and regional DOT maintenance offices. The new tools can assist asset managers in exploring opportunities to mitigate risks during regular cycles of infrastructure maintenance or replacement as well as pre/post natural disaster. The vulnerability assessment pulls together background data for use as a metric when considering adaptation or mitigation options, especially where the potential impacts are predicted to increase over time, potentially further impacting the road network.

Level of Detail Required for Assessment

This vulnerability assessment is possible because of the foundation of spatial data assembled from prior assessment efforts as well as ongoing statewide data collection initiatives. Stream crossing data, collected in SADES, plays an important role in identifying and defining aspects of a stream crossings' condition, capacity, and geometry. New Hampshire Geographic Information System (GIS) clearinghouse, known as NH GRANIT, provides an essential digital elevation model (a three-dimensional model of earth's topography viewable with GIS software or other GIS based web platforms) for the project area. This high-resolution model is made possible through a data collection methodology known as ***Light Detection And Ranging***, more commonly referred to as **LiDAR**. Detailed information on how LiDAR is used to collect data can be found on NH GRANIT's Topographic LiDAR in New Hampshire webpage. LiDAR data, made available through NH GRANIT, provides the level of detail needed to construct a GIS model for analysis of the hydraulic capacity of specific stream crossings. NHGS utilizes a digital model to determine runoff flows at various storm magnitudes and uses the outputs of the digital model to establish hydraulic vulnerability ratings for stream crossings with sufficient SADES data.

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*** Note: Weather data from the USGS "Flood of May 2006 in New Hampshire" Open-File Report 2007-1122 available at: https://pubs.usgs.gov/of/2007/1122/pdf/OFR2007-1122.pdf**

PROJECT LOCATION

List of Municipalities within the Study Area			
Auburn	Deerfield	Hooksett	Weare
Bedford	Derry	Londonderry	Windham
Candia	Francestown	Manchester	
Chester	Goffstown	New Boston	

Table 1: SNHPC Member Municipalities

The SNHPC area covers a variety of land use types ranging from urban to rural. Figure 5 depicts all municipalities within the region, and the geographic area included in this assessment. Table 1 lists the 14 municipalities in the project area. At the center of the region is Manchester, the largest city in New Hampshire. Manchester has the highest density of residents and services within the study area. Much of Manchester's runoff is controlled by conventional storm water management systems leaving the road network vulnerable to different types of risk. In contrast with the Region's urban center are rural communities such as Deerfield (pop. 4,475) and Francestown (pop. 1,552). * Rural communities in the region are largely forested with less intense land use by humans. In rural areas, the loss of a stream crossing to an extreme weather event may result in lengthy detours and travel time delays. Travel routes which may have been no more than a few miles could require dozens of additional travel miles. Rerouting could create a hardship for residents, emergency services, commuters, and deliveries. These delays could mean longer response times for emergency services, longer commutes, and in extreme situations, temporary isolation.

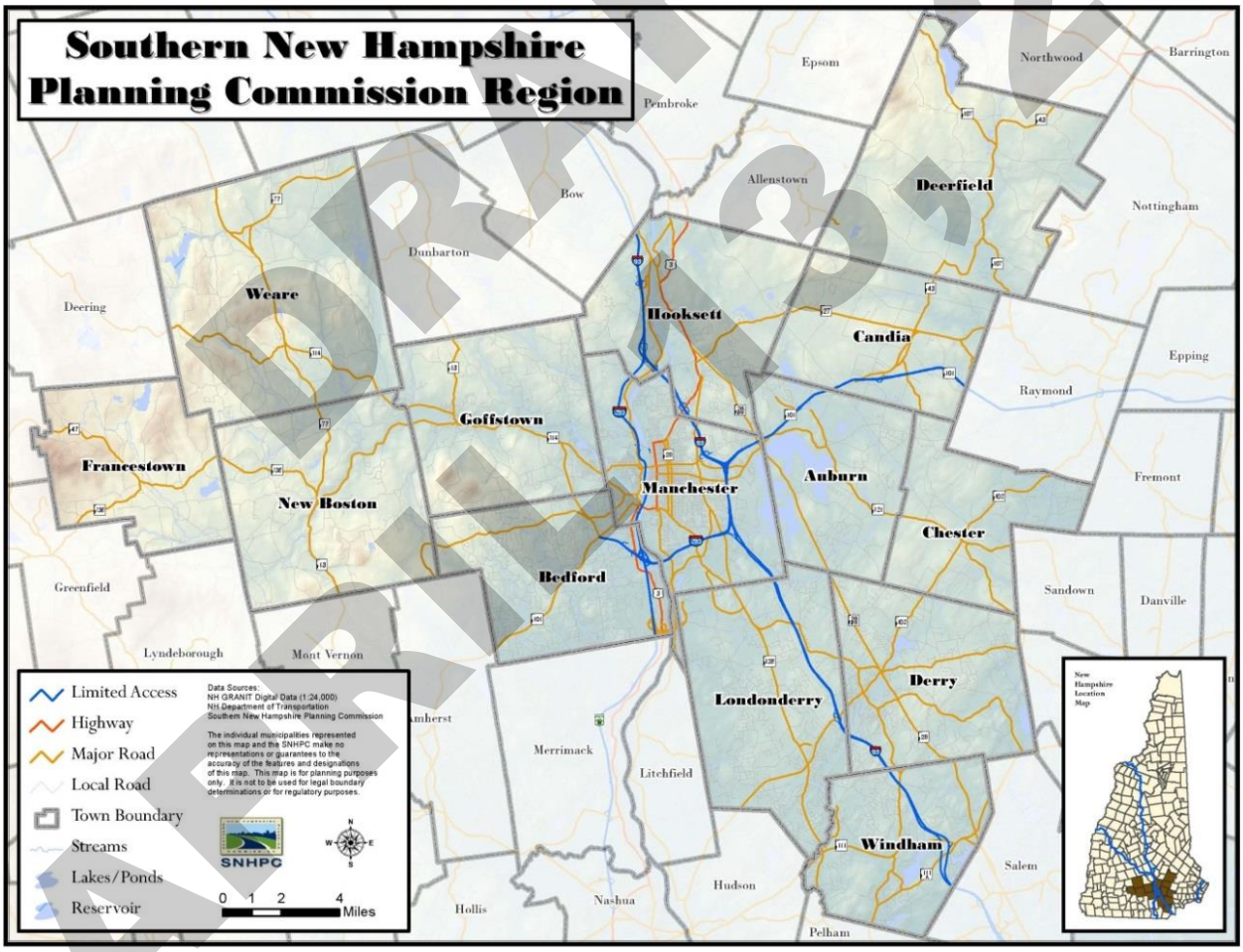


Figure 5: SNHPC Member Municipalities and Project Boundary

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* Note: Population data from U.S. Census's American Community Survey 5-Year Population Estimates. Available at NH Employment Security: https://www.nhes.nh.gov/elmi/products/cp/index.htm

PREVIOUS ASSESSMENTS & MODELING

The reports below were reviewed in preparation for conducting the current assessment. They provided valuable examples of scope, sources of data, and methodology to convey information.

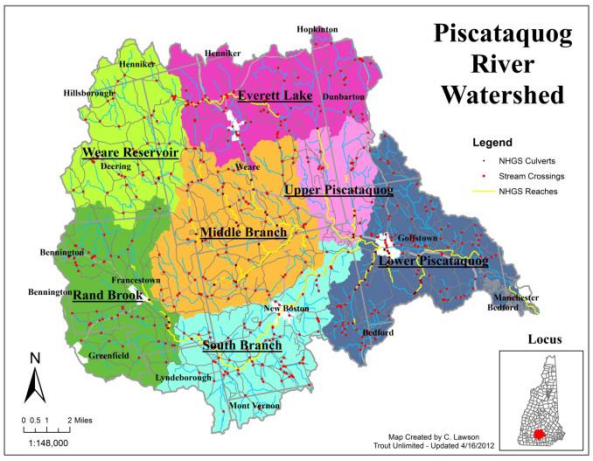


Figure 6: Piscataquog River Watershed Map

2013 SNHPC/Trout Unlimited Assessment

In 2013, SNHPC initiated the "Piscataquog River Watershed Stream Crossing Vulnerability Assessment Project". The assessment featured the work staff from Trout Unlimited and from the University of New Hampshire. This team developed a GIS model to measure hydraulic capacity of stream crossings in the selected watershed area to estimate ***peak flow*** conditions (*the maximum flow of water during a storm event*). The GIS model was developed for the area depicted in Figure 6 where field data on stream crossings (red dots on the map) had been collected. The results of the modeling included a hydraulic capacity rating for 400 stream crossings into one of three categories corresponding to the ability of the crossing to pass peak flow through the stream crossing. This model was run for the Piscataquog River Watershed under precipitation frequencies ranging from 2-year storm event up to the 100-year storm event.

2014 NHDOT Evaluation of Climate Change

In 2014, New Hampshire Department of Transportation (NHDOT) published "Potential Impacts of Climate Change on Transportation Infrastructure" as an evaluation of prominent climate change trends observed in New Hampshire. The evaluations looked at the impact of extreme precipitation, sea level rise (including storm surge), reduction in winter duration, and increasing annual average temperatures on the assets managed by NHDOT. The evaluation identified sensitivity, exposure, and adaptive capacity of transportation assets relative to current trends and climate projections. The evaluation also assigned a level of uncertainty for each of the four climate trends and grouped assets based on their level of potential vulnerability to climate variables. The NHDOT evaluation also defined expectations of how programs, policies, and cities would be affected by climate change and measured the anticipated impact. The evaluation concluded that reallocation of department resources and funding would be necessary in order to successfully adapt to the changing climate.

2015 Rockingham Planning Commission Coastal Vulnerability Assessment

In 2015, the Rockingham Planning Commission (RPC) produced a vulnerability assessment titled "From Tides to Storms: Preparing for New Hampshire's Future Coast" which identified the impacts to property and transportation infrastructure resulting from a range of sea level rise scenarios combined with more intense storm surge. While the Rockingham Planning Commission scope of work is different due to its coastal geography, the document's format of recommendations to municipalities and state agencies provided a quality local example for SNHPC's assessment process.

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2016 SNHPC/Milone & MacBroom Prioritization Report

In 2016, SNHPC sought to extend the availability of data on stream crossings for the Piscataquog River Watershed by developing a Prioritization Model. SNHPC hired Milone & MacBroom, Inc. to build upon the model developed by Trout Unlimited in 2014 and provide a methodology for prioritizing stream crossings based on four criteria:

1. Geomorphic Compatibility [GC] or the measure of how the crossing structure inhibits the flow of the stream,
2. Structural Condition [STR] to determine whether repair or replacement of the crossing structure is needed,
3. Aquatic Organism Passage [AOP] to identify if fish and other wildlife can navigate through the crossing structure, and
4. Criticality [C] to assign a value of the crossing to the functionality of the road network.

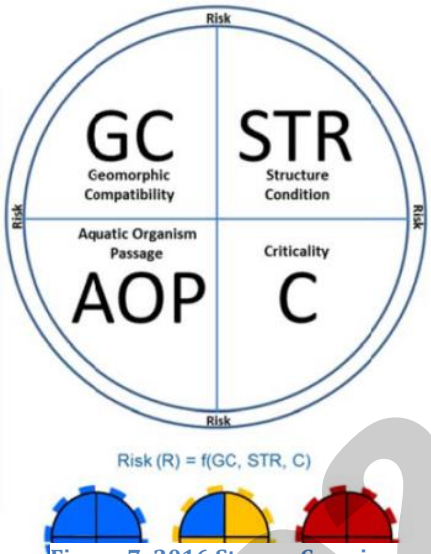


Figure 7: 2016 Stream Crossing Prioritization Scoring System

Figure 7 is a diagram for the four scores and illustrates the color-coded scoring categories: "pass" is blue, "intermediate" is yellow, and "fail" is red.* The cumulative output of the four criteria was a measure of overall risk. This risk information was packaged for consumption by municipalities to allow them to plan for a more resilient local road network and enhance capital improvement planning and budgeting. The report, titled "Piscataquog River Watershed Culvert Prioritization Model Final Report", also identified sources of funding for culvert replacement and provided content for inclusion in local hazard mitigation plans as desired. Much of the information developed in this prioritization model and report was utilized at the inception of the current SADES program. NHGS continues to develop this dataset for the study of risk associated stream crossings state-wide.

EXISTING ADAPTATION & MITIGATION EFFORTS

2009 New Hampshire Climate Action Plan

In December 2007, Governor John Lynch signed Executive Order 2007-3 to establish a *Climate Change Policy Task Force*. The executive order directed the Task Force, chaired by the Commissioner of New Hampshire's Department of Environmental Services, to develop a Climate Action Plan for the state. The 29-member task force included regulators, scientists, business leaders, utility representatives, and environmental groups. The task force also included a work group focused specifically on adaptation. In 2009, the Task Force prepared "The New Hampshire Climate Action Plan: A Plan for New Hampshire's Energy, Environmental and Economic Development Future." The Climate Action Plan established long-term goals for reinvesting in New Hampshire's Economy through reductions in carbon emissions to limit future climate change impacts. Following the Climate Action Plan provides a pathway to achieve the greatest economic outcomes for the state of New Hampshire. Recommendations to reduce emissions from buildings, improve electricity generation, reform of transportation systems and protect natural resources all sought to achieve a carbon neutral economy for the state. To achieve that goal, the plan included recommendations to maintain the amount of carbon sequestered; support regional and national initiatives to reduce greenhouse gases; and develop an integrated education, outreach, and workforce training program.

*** Note: The 2016 SNHPC/Milone & MacBroom Prioritization Report color coded categories for scoring were a precursor to the "Pass", "Vulnerable", and "Overtop" categories used by NHGS to score Hydraulic Vulnerability. See the Determinants of Hydraulic Vulnerability section for more details.**

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Along with the aforementioned recommendations, the following ***initial actions*** were developed:

- *Develop and distribute critical information on climate change*
- *Promote policies and actions to help populations most at risk*
- *Charge and empower public health officials to prepare for climate change*
- *Strengthen protection of New Hampshire's natural systems*
- *Increase resilience to extreme weather events, and*
- *Strengthen the adaptability of New Hampshire's economy to climate change*

Since the publication of the NH Climate Action Plan, NHDES has developed an Adaptation Tool Kit for NH Communities which provides access to data and resources for communities to use throughout the adaptation process. Resources are defined as follows:

- *Climate Change & Adaptation Messaging – For communities with no climate change adaptation planning that would like to start by reviewing resources*
- *Community Conversations – For communities prepared to engage in a public conversation about climate change and adaptation*
- *Assessment Tools – For communities seeking to understand their vulnerabilities to climate change impacts*
- *Planning and Implementation – For communities that have completed an assessment and would like to develop goals and strategies for planning, or want to include climate change adaptation into their plans and regulations*

This toolkit provides a connection to additional resources for communities ready to begin planning or for funding resources available to municipalities recovering from an extreme weather event. The toolkit is a point of reference used in extending conversations with local communities about their own agency to initiate and conduct assessments on a local scale around specific fields of interest.

State Hazard Mitigation Planning via Homeland Security and Emergency Management

The NH Department of Homeland Security and Emergency Management (HSEM) prepares the state's hazard mitigation plan. "The State of New Hampshire Multi-Hazard Mitigation Plan" increases coordination and integration of mitigation activities and actions throughout the State of New Hampshire and defines hazard mitigation as any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards. According to the State Mitigation Plan, there is consensus between the State Hazard Mitigation Plan Committee and the State's 2012 Risk Assessment that New Hampshire is most vulnerable to flooding. The State Mitigation Plan emphasized the recent history of flooding and noted that riverine flooding is the most common disaster event in New Hampshire. Between 2010 and the time of publishing of the State Mitigation Plan in October 2013 there were seven occurrences of Presidential disaster declarations. Between 1982 and 2011 there were 35 declared disasters; most of them were the result of precipitation events. Cumulative claims for these disasters resulted in over $175M in nominal assistance to the affected counties (sourced from HSEM). This pattern of disaster declaration and its increase in frequency in recent years is evidence of the impact weather-related events, especially riverine flooding, has on New Hampshire. Damage to communities emphasizes the need to plan for and execute mitigation and adaptation activities.

Because FEMA issued new guidance in 2015 for the minimum required content of State Hazard Mitigation Plans, the State of New Hampshire is obligated to include measures of the potential for climate change to significantly alter the types, frequencies, and magnitudes of hazards within the state's next Hazard Mitigation Plan.

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Municipal Hazard Mitigation Plans

In 2000 the United States Congress adopted the Disaster Mitigation Act of 2000, providing the legal basis for FEMA to require mitigation planning from state and local governments as a condition of mitigation grant assistance and as a prerequisite for local governments to access federal hazard mitigation funding.

In keeping with HSEM, each municipality within the region must keep a current (no more than five years old) hazard mitigation plan. The planning process for the hazard mitigation plan is similar for each municipality and includes categorical identification of man-made and natural hazards, including flooding. The hazard mitigation plans also include the identification of classification areas of risk as well as critical facilities. These plans are intended to be a means for reducing potential future losses from natural or human-caused events and benefit communities by saving lives, protecting property, reducing vulnerability to hazards, facilitating declared disaster funding aid, and speeding up post-disaster recovery. *

Each hazard mitigation plan summarizes proposed mitigation strategies through the utilization of a STAPLEE chart and is a requirement of HSEM. The STAPLEE acronym stands for the following weighting categories: Social, Technical, Administrative, Political, Legal, Economic, and Environmental factors. The STAPLEE chart lists each mitigation strategy identified in the hazard mitigation plan and applies a rating of importance with consideration of the STAPLEE categories for each listed strategy. Once scored, mitigation strategies are then ranked, assigned an anticipated cost with likely funding sources, and then assigned a timeframe for implementation. Upon HSEM approval and municipal adoption of a hazard mitigation plan, their STAPLEE charts can be referenced as part of a municipality's capital improvement plan process as a means of ultimately including hazard mitigation strategies into the municipalities' budgeting process.

The hazard mitigation plans for each of the municipalities within the SNHPC region were reviewed as part of this vulnerability assessment to determine the history of flooding risk in each community and to determine the magnitude of the hazard associated with flooding at stream crossings, roadways, and key facilities. The mitigation actions for flood type hazards are summarized in Appendix A of this vulnerability assessment.

Each community's STAPLEE chart provided locally sourced information which helped to initiate dialogue with local asset managers about flooding concerns and to solicit asset manager feedback on vulnerabilities to flooding. In total, there are 81 identified flood mitigation actions across the region with a future estimated cost outlay averaging approximately $839,000 per town. Of the 81 action items included in the list, there were ten instances where the word "debris" is mentioned, and 28 instances of the word "culvert" being mentioned in a point of action. Of the established actions to be taken to mitigate flood risks, stream crossings were identified frequently and were a common theme among the municipalities. This review of local hazard mitigation plans and their summarized respective actions, as identified in Appendix A, reinforce the value of assessing the vulnerability of stream crossings against the likelihood of heavy precipitation, including obstructions to crossings created by sediment, debris, as well as obstructions caused by beaver activity.

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*** Note: For more information about programs and assistance offered in New Hampshire refer to the NH Homeland Security and Emergency Management website at : http://www.nh.gov/safety/divisions/hsem/**

CLIMATE DATA

As part of the vulnerability assessment process, SNHPC reviewed data available from the National Oceanic and Atmospheric Administration (NOAA) via the National Centers for Environmental Information as published in "State Climate Summaries 149-NH", the Northeast Regional Climate Center (NRCC) via the "Extreme Precipitation Analysis Web Tool", and the Sustainability Institute at the University of New Hampshire (SI-UNH) via their published "Climate Change in Southern New Hampshire: Past, Present, and Future" report. The reports from NOAA and SI-UNH provide quality source data summarizing the historical changes in climate metrics including temperature, precipitation, growing season, and lake ice-out conditions. The NOAA's climate summary references the entire state of New Hampshire while the SI-UNH report is specifically based on local weather observation data collected from weather stations throughout the southern half of New Hampshire. This assessment reviews the overall observations of climate change with a more detailed focus on the impact of precipitation on transportation infrastructure. The climate data in this report generally highlights the impacts of the changing intensity and frequency of precipitation events in southern New Hampshire.

OBSERVATIONS AND HISTORIC TRENDS

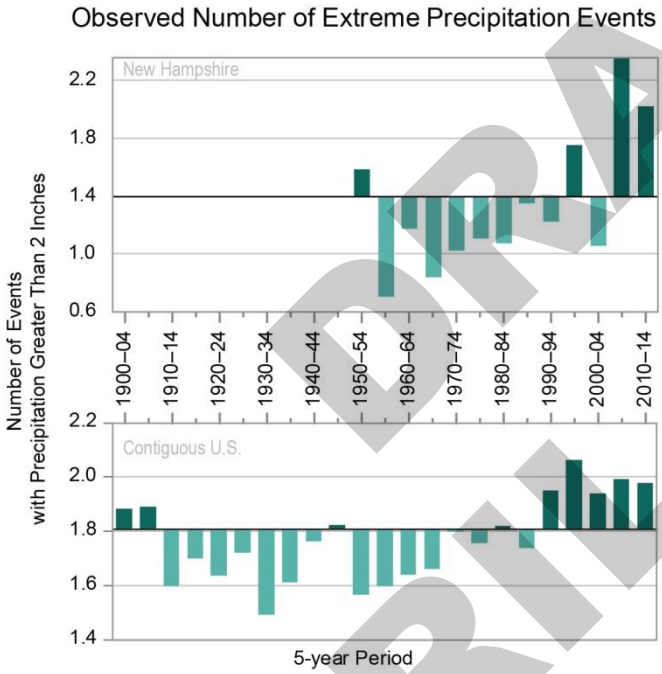


Figure 8: Observed Annual Extreme Precipitation Events, Averaged Over 5-year Period

Figure Note: Precipitation events reported from 17 long-term reporting stations in Southern New Hampshire. The extreme precipitation events for the contiguous United States (bottom panel) is reporting from a larger more complete data set. The dark horizontal lines represent the long-term average. Long-term stations back to 1900 were not available for New Hampshire. The number of extreme precipitation events has been the highest during the last decade.

Source: CICS-NC and NOAA NCEI

The NOAA's Climate Summary for New Hampshire identifies the following key findings, "Average annual temperature has increased approximately 3°F in New Hampshire since the early 20th century. *Winter warming has been larger than any other season*. […] Precipitation has increased during the last century, with the highest numbers of extreme precipitation events occurring over the last decade." New Hampshire is experiencing an increase of precipitation; the NOAA summary notes a 12% to 20% increase in annual precipitation in southern New Hampshire. The NOAA summary also provides data on the trend in frequency of extreme precipitation, a metric NOAA defined as two or more inches of precipitation in a 24-hour period. New Hampshire experienced an average of 2.4 events annually of extreme precipitation events during 2005–2009 and 2 events annually from 2010–2014. Figure 8 illustrates extreme precipitation trends both for New Hampshire (upper bar graph) and for the United States (lower bar graph). Figure 8 data shows an increase in extreme events for New Hampshire and the United States with very pronounced changes in the number of events in New Hampshire beginning in 2005.

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The "Climate Change in Southern New Hampshire: Past, Present, and Future" report by SI-UNH identified long-term warming trends in southern New Hampshire. Both minimum and maximum winter temperatures have increased; with maximum temperatures increasing substantially. The change in winter low temperatures were identified as having significant impacts on snow cover and patterns of spring snow melt. The report from SI-UNH also identified trends in extreme precipitation for southern New Hampshire. The report's historic climate change data on extreme precipitation is categorized by intensity ranging from a threshold of 1 inch or greater events in a 24-hour period up to weather events of 4 inches or greater in a 48-hour period. Between 1960 and 2012 southern New Hampshire experienced a significant increase in the number of extreme precipitation events. In some locations within southern New Hampshire, the state experienced four to ten-fold increase in the number of more extreme precipitation events over the 52 years of data analyzed. These trends in extreme precipitation are important indicators given their association with flooding impacts.

ESTIMATE OF TODAY'S EXTREME PRECIPITATION

Climate change trends of increasing temperatures and increased precipitation place infrastructure designed for historic conditions at risk. Historically, the NHDOT used the "TP40 Rainfall Frequency Atlas" to estimate precipitation totals for hydrological analyses associated with designing stream crossings. Climate conditions have changed measurably since TP40 was established as a design standard. As a result, NHDES and NHDOT have adapted to the changing climate conditions by transitioning to the use of more current and accurate estimates of precipitation data. NHDOT and NHDES now utilize data from the Northeast Region Climate Center at Cornell University "Web Tool" (aka Precip.net) to source rainfall totals for design of stream crossings.

Table 3 compares the 24-hour rainfall totals by annual chance of occurrence for TP40 and Precip.net. Estimates are for each municipality as well as the region average. The table illustrates little difference in the more frequent weather events but shows a significant increase of rainfall totals in the 100-year occurrence category. These higher estimated rainfall totals for 100-year precipitation events require increased calculated runoff volumes when designing stream crossings to meet peak stormwater runoff flows. NHDOT is currently utilizing the Precip.net instead of TP40 calculations to account for the future increase in precipitation totals. This is a real-world example of how NH DOT systems are adapting to climate change.

Estimated 24-hr Rainfall by Chance of Occurance in Inches

	TP-40 Data	Precip .net	TP-40 Data	Precip .net	TP-40 Data	Precip .net
	1 Yr	1 Yr	10 Yr	10 Yr	100 Yr	100 Yr
Auburn	2.5	2.5	4.3	4.4	6.4	8.0
Bedford	2.5	2.4	4.3	4.3	6.4	7.8
Candia	2.5	2.5	4.3	4.4	6.3	8.0
Chester	2.5	2.5	4.3	4.6	6.4	8.3
Deerfield	2.5	2.5	4.3	4.5	6.3	8.0
Derry	2.5	2.5	4.3	4.5	6.4	8.2
Francestown	2.4	2.4	4.2	4.4	6.3	7.8
Goffstown	2.5	2.4	4.2	4.3	6.3	7.6
Hooksett	2.5	2.4	4.3	4.2	6.3	7.5
Londonderry	2.5	2.5	4.3	4.4	6.4	8.0
Manchester	2.5	2.4	4.3	4.3	6.4	7.7
New Boston	2.5	2.4	4.2	4.4	6.3	7.8
Weare	2.4	2.4	4.2	4.3	6.3	7.5
Windham	2.5	2.5	4.3	4.6	6.5	8.4
Region Avg.	**2.5**	**2.4**	**4.3**	**4.4**	**6.4**	**7.9**
Difference	-2%		3%		24%	

Table 3: Extreme Precipitation Estimates, TP-40 & Precip.net

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CLIMATE PROJECTIONS

Projections of future climate were established alongside the historic trends in climate change in the "Climate Change in Southern New Hampshire" report conducted by SI-UNH. General Circulation Models (also referred to as Global Climate Models) provide quantitative projections of future climate based on established scenarios for carbon emissions. The climate change impacts quantified in the SI-UNH report were produced from the projection of two established General Circulation Models based on their respective scenario for global carbon emissions. The first is a "higher emissions" scenario where the world continues to depend on fossil fuels as the primary energy source, labelled A1Fi. A second "lower emissions" scenario is based on changes to human behavior which result in reduced carbon emissions over time. This second scenario is labelled B1. Figure 9 shows the pattern of carbon emissions for both scenarios through the year 2100. Global Circulation Models produce geographic projections of temperature, precipitation, and other climate variables at monthly and daily scales. SI-UNH applied a data analysis technique known as "downscaling" to project climate changes at a more granular scale than the world model.

What is a General Circulation Model?

General Circulation Models represent the physical processes in the atmosphere, ocean, ice, and land surface, and is the most advanced tool currently available for simulating the response of the global climate to increasing greenhouse gas concentrations.

Visit:
The Intergovernmental Panel on Climate Change for more information.

Source: Intergovernmental Panel on Climate Change

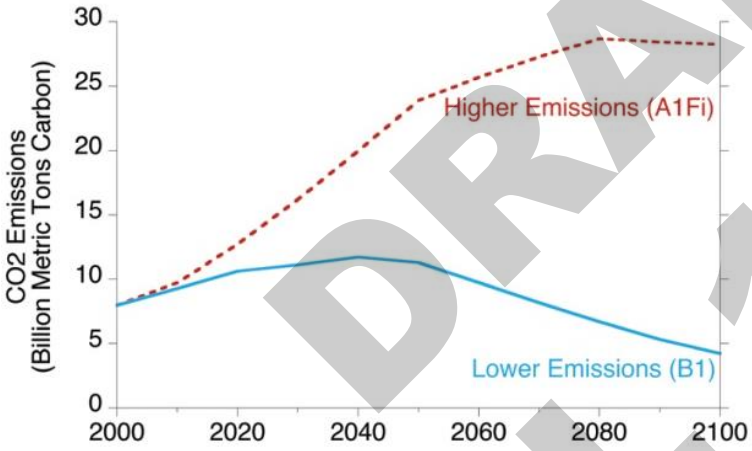


Figure 9: Projected Global Emissions of Carbon Dioxide Under Two Separate General Circulation Models

The SI-UNH report utilized the two selected carbon emissions scenarios shown in Figure 9 to create climate projections for each of the 25 historic daily weather monitoring stations located throughout the southern half of New Hampshire*. This allows for a more localized analysis. The specifics of the analysis are described in detail in the SI-UNH climate change report. For the purposes of this vulnerability assessment a general summary of projected changes within the southern New Hampshire climate are provided.

Future Seasonal Conditions

The downscaled climate data under both high and low emissions scenarios project a continuation of temperature increase for southern New Hampshire. In the 30-year period between 1970 and 1999, southern New Hampshire saw an average of seven days per year over 90 degrees. In the 30-year period between 2070 and 2099, it is projected the number of 90-degree days will average 23 days per year under the low emissions scenario and 54 days per year under the high emissions scenario. The winters are projected to lose between 19.5 and 43.9 days per year of below freezing temperatures, the higher increase representing a 27% decrease in the length of the traditional winter season. Southern New Hampshire has a historical average of 105 days of snow cover; models project a decrease between 23% (scenario B1) and 50% (scenario A1Fi) in snow covered days by the year 2099.

***Note: All data contained in the Climate Projections section of this report is sourced from: "Climate Change in Southern New Hampshire: Past, Present, and Future". Referenced weather station data is available in Appendix A of the SI-UNH report.**

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Future Precipitation Conditions

Southern New Hampshire has already experienced a significant increase in precipitation over the past century and that trend is projected to continue. By the next century, southern New Hampshire is expected to experience an additional 7.4 to 8.8 inches of precipitation each year (a 17% to 20% increase) over the 30-year average from 1980 to 2009. According to SI-UNH, precipitation changes are not evenly distributed throughout the yearly cycle. Precipitation during winter and spring are projected to increase significantly, while summer and fall will experience smaller increases in rainfall averages. Climate projections indicate a wetter future but one where precipitation comes almost twice as often in the form of extreme precipitation with higher temperatures and accelerated evaporation between extreme events. This pattern coupled with less snow melt and warmer summer temperatures will increase the changes of drought. Increased chances of drought conditions may also pose a threat to agricultural activity within the region.



Figure 10: Example of Road Washout from Overtopping
Source: NHGS

Figure 10 illustrates the damage caused as a result of elevated runoff from an extreme precipitation event overtopping a road and washing out the crossing. The change in the intensity and frequency of extreme precipitation is a primary risk factor for stream crossings. The 30 years between 1980 and 2009 saw an average of 4.3 extreme precipitation events greater than 4 inches per decade. The end of the century projections for southern New Hampshire anticipates extreme precipitation greater than 4 inches will occur 6.1 times per decade for the low emission scenario and 7.6 times per decade under the high emission scenario. Given the trends in weather and precipitation patterns of the past century and those of the next century, it is anticipated that changes in climate will continue to bring southern New Hampshire further increases in annual total rainfall amounts, increases in the frequency of heavy rainfall events, increases in rainfall totals during winter and spring seasons, reductions in the number of days with snow cover and lake ice, and more short-term drought conditions during growing seasons.

The cumulative impact of these changes in climate will change the patterns of storm water runoff and stream flow. Southern New Hampshire will experience increases in streamflow intensity and elevated streamflow will happen more frequently. The transition of winter precipitation from snowfall to rainfall threatens to increase storm water runoff intensity where frozen ground limits infiltration. Summer precipitation in the form of more intense downpours threatens to limit the ability of precipitation to be absorbed into the soil, impacting groundwater levels and drinking water assets. Both conditions will increase the rate of streambed erosion and occurrences of flooding.

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STREAM CROSSING DATA

The University of New Hampshire, in partnership with FHWA and NHDOT, support the Technology Transfer Center (T2). T2 provides local technical assistance, workshops, and training and operates a clearinghouse to collect and share transportation asset data. This work is conducted through T2's SADES program. SADES utilizes Esri's proprietary ArcGIS Online software as a platform to provide access to asset management databases. The SADES online tools allow anyone with a smartphone or tablet to reference or collect data efficiently from the field. The ongoing year-over-year field assessment of stream crossings has resulted in well over 10,000 data points collected to date. In the SNHPC region alone there are approximately 1,600 documented stream crossings. Stream crossing data collected is quality controlled by NHGS according to the protocol in the "New Hampshire Stream Crossing Initiative Field Manual". The protocol is in its eighth iteration and the procedural assessment attempts to collect nearly 100 attributes of data for each stream crossing location. This stream crossing data is accessible for viewing and reference by the general public via the SADES "NH Stream Crossing Initiative" web mapper tool.

EXISTING ASSET ANALYSIS

Access to the stream crossing data and the ability for SNHPC to conduct analysis on the dataset is the foundation on which this report is based. Without the years of field data collected, the report would be limited to spot analysis of stream crossings to develop typologies of their physical characteristics. Analysis of a small sample of stream crossings would have limited application for modeling due to the widely variable nature of existing stream crossing configurations, age, size, and structural condition. The robust documentation of stream crossings within the SNHPC region provides a largely complete picture of the existing crossings and continues to be of service for modeling and analysis.

Data applications for modeling and analysis date back to the documentation of hydraulic capacity in the 2016 "Piscataquog River Watershed Stream Crossing Vulnerability Assessment Project" and continues with NHGS completion of a statewide application of hydraulic capacity analysis and documentation through the use of the "Streamworks Culvert Assessment Model: Version 2.0". The Streamworks model utilizes GIS to build a composite map of stream crossing locations, bare earth elevation, precipitation estimates, soil characteristics, watershed basins, streamflow paths, land use, and other run-off characteristics to calculate peak flow at any given stream crossing point. The maximum flow is measured at 2, 10, 25, 50, and 100-year storm intensities and is used to determine if a stream crossing will exceed its hydraulic capacity and overtop the roadway for a given storm event.

With NHGS actively working on a statewide effort to model and document the hydraulic capacity of stream crossings at the time of this report, SNHPC sought to identify areas of vulnerability and risk assessment that complement NHGS efforts. Coordination between NHGS and SNHPC resulted in a focus on hydraulic vulnerability as an area of assessment that would bolster the efforts of NHGS while also offering new content for risk analysis and local outreach.

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Determinants of Hydraulic Vulnerability

Hydraulic vulnerability is associated with two common conditions. The first is the intensity of a rainfall event exceeding the designed capacity of a stream crossing to pass through runoff. Stream flow exceeding a stream crossing's hydraulic capacity is mostly a factor of storm intensity. Factors such as land use changes over time also play a role in changing runoff patterns. All stream crossings have an upper limit on their ability to pass through water; when this threshold is exceeded, ponding occurs creating infrastructure vulnerability. Additional stream flow results in water overtopping the road. Figure 11 diagrams the associated levels of risk.

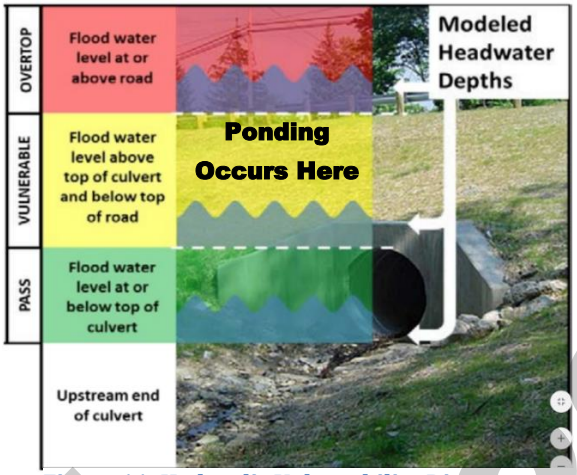


Figure 11: Hydraulic Vulnerability Diagram
Source: NHGS

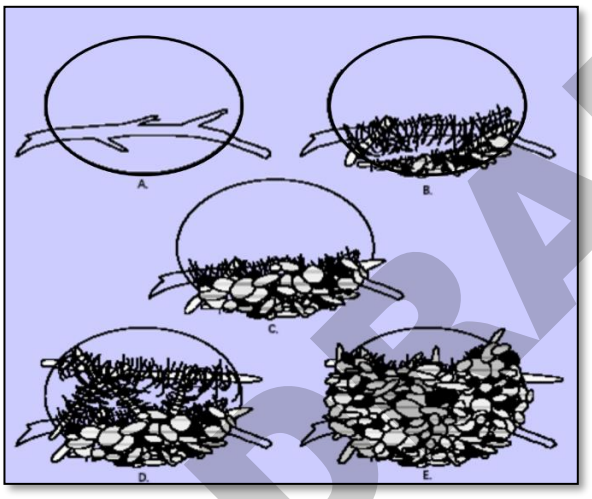


Figure 12: Series Diagram of Inlet Debris Blockage
Source: How Culverts Fail, Sam Flanagan, NOAA

A second condition associated with hydraulic vulnerability is *debris blockage of a stream crossing's upstream inlet*. Debris blockage can materialize over a short or a long period of time and cause a reduction in the hydraulic capacity of the stream crossing. Elements such as beaver activity, upstream water body type, upstream vegetation, local maintenance practices, and stream crossing geometry all contribute to the potential for a stream crossing to develop a debris blockage and a reduction in hydraulic capacity. Figure 12 illustrates how inlet debris blockage of a stream crossing accumulates over time to reduce hydraulic capacity. When stream crossings do experience reductions in hydraulic capacity due to debris, the area upstream of the stream crossing typically begins to pond, retaining some upstream flow or "headwater" during and after storm events. In some cases, stream crossings will develop a permanent pond upstream of their inlet. Ponding due to debris blockage tends to occur seasonally. Such conditions are difficult to translate into long-term risk as they can fluctuate dramatically depending on maintenance procedures. Because the vulnerability assessment is looking at risk over a longer timeline, conditions associated with inlet debris blockage were given a reduced importance as a criterion for prioritizing of stream crossings as defined in the Prioritization section later in this report.

In 2019, NHGS staff were developing methods to examine the potential for catastrophic failure of stream crossings. This modeling effort is known as the Culvert Failure Hydraulic Modeling project. The model explores how water moves and the ability of such a failure to inflict damage. The model uses a theoretical maximum volumetric storage of water (and energy) in the area upstream of a given crossing to model the hydraulic traits of releasing this water into the stream below. These efforts by NHGS have the potential to enhance regional vulnerability assessments, such as this one, in the future.

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STREAM CROSSING LOCATION

Stream crossings within the SNHPC region are well documented in the SADES stream crossing database. There are approximately 1,600 documented stream crossings throughout the 14 municipalities comprising the SNHPC region. Figure 13 illustrates how the SADES stream crossing data can be formatted for viewing with GIS software. In the figure, stream crossing locations are illustrated as blue dots with a unique numerical identifier for each crossing. The identification number allows for easy reference of collected field data. Each stream crossing location has a wide array of attributes such as structure type, opening size, road name, stream name, structure material. These traits are all recorded in the SADES database. There are over 90 attributes for field documentation at each stream crossing location. These attributes provide a comprehensive understanding of the condition and function of a given stream crossing at a point in time. When these attributes are collected in accordance with the Stream Crossing Assessment Field Protocol, and pass a Quality Assurance and Quality Control (QAQC) review, NHGS provides additional values derived from computer analysis of field data. NHGS currently uses the field data to develop an Aquatic Organism Passage Score, and a Geomorphic Compatibility Score. As of January 2020, NHGS also provides Hydraulic Vulnerability Scores for many of the region's documented stream crossings. Utilizing the efforts of State agencies, SNHPC developed an online GIS map for use by asset managers to view this data. The online map provides access to SADES documented stream crossings and can be quickly filtered by municipality along with some of the criteria of risk included in the Stream Crossing Prioritization section of this report.

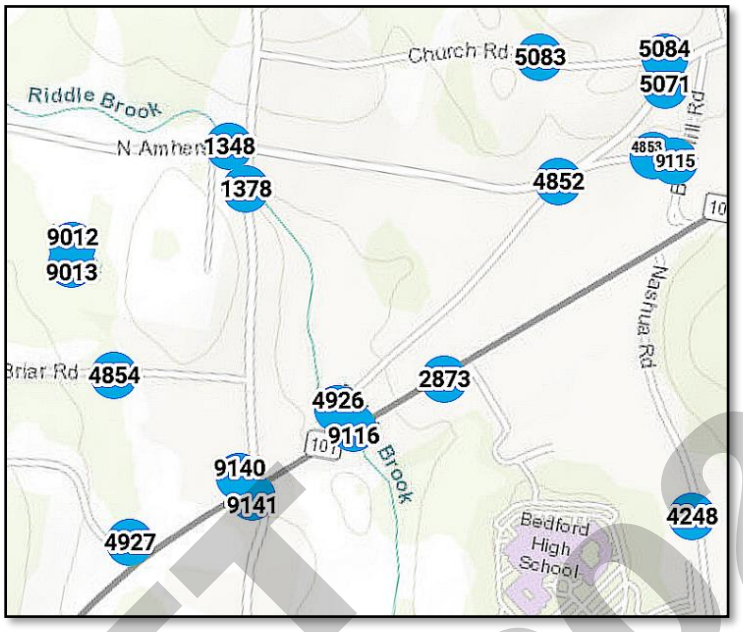


Figure 13: Example of SADES Stream Crossing Data Rendered with GIS

Beyond utilization of SADES data for analysis, SNHPC produced formatted stream crossing location maps for each of the 14 municipalities within the region. At the beginning of the Vulnerability Assessment process, the maps were printed for use during in-person meetings with local asset managers to gather their input on current risks. During in-person meetings, asset managers were prompted to provide information about stream crossing locations missing from the map, locations with existing or past flooding and maintenance issues, as well as information about any recently replaced stream crossings. Reviewing maps with asset managers provided important information on the challenges of maintaining stream crossings. Asset managers were able to identify stream crossings missing from the maps and provide information on how smaller culverts tend to fail. Of note, many asset managers noted a high frequency of localized flooding associated with beaver activity. Asset managers also provided information on stream crossing locations that had been replaced. SNHPC staff recorded asset manager input in the "Appendix D: Asset Manager Input" section of this report, this data was used later in the assessment process to develop criteria for prioritization of risk for stream crossings.

Note: The maps used to facilitate outreach and document local input are included in "Appendix B: Project Map Set" of this report.

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GIS-Based Resources

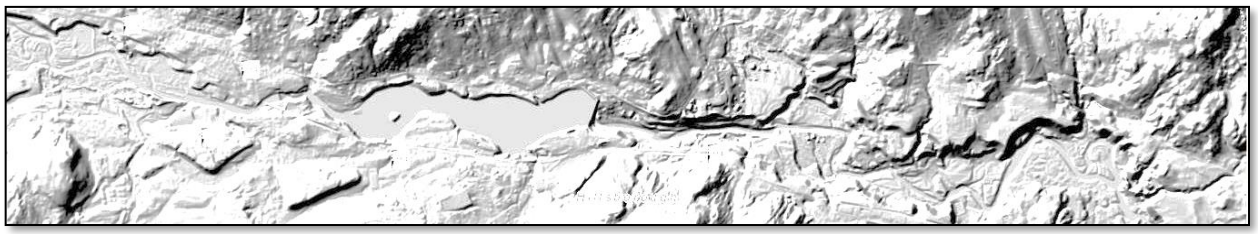


Figure 14: Illustration of Digital Elevation Model Data Rendered in GIS

To develop maps and analyze risk for this vulnerability assessment a variety of data sources were compiled in GIS. GIS data needed for the aforementioned task were sourced from SNHPC, NH GRANIT, UNH Technology Transfer (T2) service, NHGS, NHDOT, and FEMA. Table 3 provides a summary of the GIS dataset used to develop the project maps, and to communicate concepts of vulnerability to municipal staff. The GIS dataset below were critical to conducting evaluation and analysis of risk that resulted in the prioritization of stream crossings for the region.

Table 3: Utilized GIS Layers by Category, Name, and Description

Category	Asset / Resource Name	Use Description
Natural Resources	LiDAR Bare Earth Model	Digital model of elevation, no vegetation
	Historic Flood Hazards	Locally reported flood events
	FEMA Flood Hazard Areas	Floodplains, flood insurance delineation
	Inland Surface Water	Lakes, streams, and other water bodies
	HUC12 (Hydrological Unit)	Watershed boundaries, (areas of runoff)
Land Use & Public Facility	NH Town Boundaries	Town boundaries with name information
	MS Building Footprints	Ground structures from imagery
	2015 Aerial Photography	Orthogonal, 1ft resolution, color imagery
	SADES Stream Crossings	Inventory of culverts and small bridges
Transportation Infrastructure	NHDOT Facilities	DOT buildings, and physical structures
	NHDOT Road Center Lines	Road names, volumes, classifications, etc.

Hydraulic Vulnerability Data

The Streamworks TU 2.0 model produces an output of pass, vulnerable, or overtop for a given storm-year event at appropriately documented stream crossing. * The model considers two elevations at each crossing: the top of roadway elevation and the top of the culvert inlet. A rating of ***Pass*** is assigned when the runoff depth is below the top of the culvert inlet. Next, a rating of ***Vulnerable*** is assigned when the runoff water elevation is between the top of the culvert and the top of the roadway. Finally, a rating of ***Overtop*** is assigned when the runoff depth is calculated to be greater than the top of roadway elevation. See the Determinants of Hydraulic Vulnerability section of this report for more information on conditions associated with each rating.

Application of Stream Crossing Data

The data and maps described above, combined with asset manager input and provided Climate Data create the foundation for the measurement of risk posed to the transportation network. The ability to locate stream crossings, evaluate their condition, assign sensitivity values, and calculate their capacity all became measures which were used to develop a prioritization model and produce a list of high priority stream crossings for municipalities within the region.

* Note: **Streamworks Culvert Assessment Model: Version 2 User's Manual identifies the needed datasets to successfully run the model. The number of stream crossings in the SNHPC region to receive a rating are limited to those locations with the requisite data to run the model.**

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MEASURES OF VULNERABILITY

DEFINING VULNERABILITY TO CLIMATE CHANGE

The Vulnerability and Adaptation Framework defines the term **Vulnerability** in the context of climate change as a reference "to the degree to which a system is susceptible to, or unable to cope with adverse effects of climate change or extreme weather events." In the transportation context, climate change vulnerability is a function of a transportation system's exposure to climate effects, sensitivity to climate effects, and its adaptive capacity to change.

The FHWA Vulnerability and Adaptation Framework 3rd Edition defines each term:

> ***Climate Effect*** *– A characteristic of the climate that affects the transportation system. The climate variables most often analyzed in a transportation vulnerability assessment are temperature, precipitation, sea level, and river discharge.*
>
> ***(Asset) Sensitivity*** *– Refers to how an asset or system responds when exposed to a stressor and is one of the components of vulnerability. This also includes exposure and adaptive capacity. To analyze sensitivity, the vulnerability assessment team determines whether or by how much transportation assets could be affected by a specific stressor.*
>
> ***Adaptive Capacity*** *- Refers to the ability of a transportation asset or system to adjust, repair, or flexibly respond to damage caused by climate variability or extreme weather.*

Where the measures of climate effect or climate exposure are high, road networks can be highly impacted; where the roadway assets have limited ability to change in response to effects or exposure, then adaptive capacity is low. Regarding this assessment, the risks to stream crossings *[vulnerability]* are summed up by measuring how an increase in frequency and intensity of extreme precipitation *[climate effect]* would approach a threshold of damage to stream crossings or cause disruption to the road network *[asset sensitivity]* and the ability of the asset manager to restore the road network to continue to function in the event of a loss of a stream crossing *[adaptive capacity].*

In this context of this vulnerability assessment the terms of vulnerability translate as:

[VULNERABILITY] = [CLIMATE EFFECT] + [ASSET SENSITIVITY] + [ADAPTIVE CAPACITY]

This assessment's analysis utilized available data from multiple sources in conjunction with local input from asset managers to assign values to each component of the above equation and measure vulnerability for stream crossings in order to prioritize potential adaptation and mitigation actions.

CLIMATE EFFECT / EXPOSURE

The selected climate effect for this assessment is extreme precipitation. The effect is measured by how much and how often precipitation will fall within the region. This climate effect poses a general risk to all stream crossings and on the entirety of the region's transportation system. The climate effect component is supported by the Climate Data section of this report. The historic trends and projections in climate point to an increase in the intensity and frequency of precipitation. As the climate changes into the future, the increased frequency and intensity of precipitation will result in a higher number of weather events with runoffs that exceed the hydraulic capacity of individual stream crossings. The result is an increased exposure to environmental factors.

Note: While this assessment references anticipated changes in extreme precipitation over time (the Climate Effect/Exposure), the analysis does not apply projections of change in precipitation to the prioritization of stream crossings.

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ASSET SENSITIVITY

Stream Crossing Sensitivity Types	
Possible System Disruption	Loss of Vehicular Travel Routes
	Delayed Emergency Response
	Loss of Industrial Production
	Diminished Commercial Activities
	Delayed Maintenance Operations
Possible Damage Types	Scour of Stream Crossing
	Washout of Roadways
	Reduced Infrastructure Lifespan
	Flooding of Buildings and Property
	Inundation of Essential Utilities

Table 4: Asset Sensitivity Types

A highly sensitive asset is one that will experience a large degree of impact if the climate effect varies even a small amount; a less sensitive asset can tolerate high levels of climate variation before exhibiting an adverse impact. Asset sensitivity provides a useful way to identify and measure the threshold for impact. For stream crossings, components of sensitivity were derived from factors impacting the integrity of the stream crossing and the overall function of the road network. Factors such as traffic volume on a road segment and overall condition of a stream crossing structure were used gauge sensitivity. Table 4 identifies indicators of stream crossing sensitivity to extreme precipitation in two categories based on the nature of the impact. The first category is services and systems which can be disrupted by extreme precipitation and the second category is property damage types possible from extreme precipitation. Table 4 also includes impact types ranging from intermittent to prolonged loss of a stream crossing. Because sensitivity is variable from one crossing to the next, an emphasis was placed on using documented variables that are measurable to specific stream crossings such as location and condition. The selected measures where identified by asset managers based on their observations of patterns of impacts to stream crossings.

When determining sensitivity, asset managers provided valuable input to identify the impacts to road networks experienced during extreme precipitation events. Asset managers were asked what kind of impacts were experienced during different types of precipitation events and how the seasons changed the impacts experienced. The following summarizes the comments from asset managers:

“
- *Some smaller culverts are regularly affected by heavy rains.*
- *Seasonal flooding causes detours and damage to culverts.*
- *Longer, heavier flooding events will cause washouts and road closures.*
- *Emergency repairs and temporary structures are needed to address road closures.*
- *When roads are closed, it can create long detours and traffic issues.*
- *When flooding overtops a roadway, it creates unsafe conditions for motorists.*
- *Homes in low-lying areas and near wetlands are more likely to have flooding.*
- *Longer, multi-day, rain events tend to create widespread flooding conditions.*
- *Summer downpours tend to create localized flooding.*

”

A list of input from local asset managers is available in “Appendix D: Asset Manager Input” of this report. The input list is organized by municipality and includes information about the location and identification number for stream crossings along with comments from asset managers. Identified crossings also received an assessment action based on the comment type. The list of stream crossings generated from asset manager input provided a criterion for prioritizing stream crossings later on in the vulnerability assessment process.

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ADAPTIVE CAPACITY

The adaptive capacity of stream crossings is measured by the ability of the road network and users of the road network to adjust to the climate effect of extreme precipitation. The ability to adapt stream crossing infrastructure to changing climate is a critical tool for moderating potential damages, taking advantage of opportunities, and for coping with the consequences of impacts. Adaptive capacities are identified through the skills and strategies utilized in responding to challenges brought about by changing climate effects. In the context of stream crossings, adaptive tactics can be deployed to maintain travel patterns, economic productivity, and to preserve transportation system function. Successful strategies for adaptation include t*he ability of municipalities to learn and retain knowledge about past experiences* and apply them to changing conditions. SNHPC's outreach activities identified flexibility in the approach asset managers used to make decisions or solve problems. Rural communities with limited resources often found ways to reuse or extend the life of infrastructure as a means for addressing impacts. For example, Candia and Francestown reused corrugated plastic culverts from temporary repairs. Larger communities demonstrated capacity to use the city budget process to source funding for ongoing capital investments to replace of stream crossings. For example, Bedford and Manchester plan for cost of stream crossing replacement in their capital improvement plans.

In conducting outreach to asset managers, some questions were raised to initiate a dialogue about the level of adaptive capacity in each municipality:

- Do municipalities have staff capable of repairing or replacing stream crossings?
- Are funding mechanisms available for emergency replacement of stream crossings?
- Can asset managers and residents effectively communicate with municipal leadership to allow them to make informed decisions when changes in conditions arise?
- Are staff documenting prior events in a manner that is helpful to avoid reoccurrence?

In general, this assessment found that all communities are currently practicing or have the ability to practice the above strategies and to effectively adapt to changes over time.

Terminology: Adaptation vs. Mitigation

In the context of climate change, the term adaptation is different than mitigation. Adaptation action is deployed in response to changes in conditions or shocks brought on by climate change; while mitigation refers to actions taken to reduce future threats posed by climate change. Adaptation is the response to conditions as they arise, and mitigation is the action taken prior to change. Both adaptation and mitigation are used to lessen the severity of climate change impacts and this report uses both terms when making recommendations as part of this vulnerability assessment.

Mitigation

Recommendations for mitigation fall within the category of "Adaptive Capacity" relative to the measures of vulnerability. Recommended mitigation efforts include adopting adaptation strategies proposed by the State of New Hampshire's Department of Transportation in their "Potential Impacts of Climate Change on Transportation Infrastructure" report. Mitigation also includes recommendations for pre-impact improvements to infrastructure such as replacement of poorly performing stream crossings to increase hydraulic capacity or the implementation of more aggressive maintenance plans to clear debris from stream crossings. Mitigation can also include the development of new strategies for adaptation of infrastructure such as the adoption of new design standards for use by engineering staff as they plan future stream crossing replacement projects.

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STREAM CROSSING PRIORITIZATION

CRITERIA FOR STREAM CROSSING PRIORITIZATION SCORING

The prioritization scoring criterion were developed using the input from asset managers during in-person interviews regarding risk factors for stream crossings. SNHPC staff then developed scoring levels which produced even distributions of data across each criterion. Table 5 defines the scoring criteria used in the model as well as the GIS dataset use to establish risk scores based on the following criteria:

Table 5: Scoring Criterion for Stream Crossing Prioritization

SCORING CRITERION FOR STREAM CROSSING PRIORITIZATION		
Criterion	**Score**	**Description**
Road Segment Traffic Volume (NHDOT):	10	Greater than 30k cars/day
	8	Between 20k and 30k cars/day
	6	Between 10k and 20k cars/day
	4	Between 5k and 10k cars/day
	2	Between 1k and 5k cars/day
	0	Less than 1k cars/day
Stream Crossing Proximity to Flood Zone (FEMA):	5	Within 100' of the floodway
	4	Within 100' of 100-yr flood zone
	3	Within 100' of 500-yr flood zone
	2	Within 100' of other flood zone
	0	Beyond 100' of any flood zone
Hydraulic Vulnerability 10-Yr Storm (NHGS):	5	Overtop
	4	Vulnerable
	3	Unknown (Data Missing)
	0	Not Applicable to Crossing Type
	0	Pass
Beaver Activity (SADES)	2	Beaver Activity Documented
	0	No Activity Documented
Structure Condition (SADES):	10	Crossing in poor condition
	5	Crossing in fair condition (or unknown condition)
	0	Crossing in Good condition
Struct. Matl. (SADES):	2	Structure is metal
	0	Structure is not metal
Local Flood Hazard (NHGS):	10	Stream crossing within' 100 of flood hazards
	0	Stream crossing not within' 100' of flood hazards
Asset Mngr. (SNHPC):	10	Stream crossing ID'd
	0	Stream crossing not ID'd

The results of the stream crossing prioritization were used to select stream crossings to be reviewed with town administrators, emergency managers, and asset managers.

1. **Road Segment Traffic Volume –** Used to approximate the importance of a stream crossing to the transportation network.

→ Higher volume roads are critical to the function of the road network.

2. **Flood Zone Proximity –** Locations with a high chance of flooding will experience more frequent flooding in the future as the climate changes.

→ Flood Zones are scored based on current flooding probabilities developed by FEMA.

3. **Hydraulic Vulnerability –** Included as a measure of sensitivity of stream crossings to extreme precipitation events.

→ A score of fail or vulnerable during more frequent rainfall events indicates a crossing with a greater sensitivity to extreme precipitation

4. **Beaver Activity –** Stream crossings with documented beaver activity have a greater potential to experience inlet obstruction and reduced hydraulic capacity.

→ Beavers are known to use stream crossing inlets to create dams, this presents obvious risk to the crossing.

5. **Structure Condition –** As an indicator of potential for structure failure or reduced hydraulic capacity.

→ Stream crossings in poor condition are more likely to fail and result in washout or loss of the roadway.

6. **Structure Material –** Structures made of metal are more susceptible to corrosion and early failure.

→ pH tests of regional streams documented acid levels as high as vinegar in some locations.

7. **Local Flood Hazards –** Local Hazard Mitigation Plans document prior flooding events and are an indication of the likelihood of a future flood event.

→ Recurring flooding areas have a greater probability of being an issue again in the future.

8. **ID'd by Asset Manager –** Locations identified through direct communication with road agents and public works staff.

→ Issues raised by asset managers are likely to be the most in need for local mitigation action.

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Coarse Screen of Missing Stream Crossings

While there are a high number of stream crossings within the SADES database for the region, it is not a complete inventory of stream crossings within the region. Visual review of the intersections of roadways and streams with asset managers resulted in the identification of 151 locations yet to be documented in the SADES database. Further, a simple GIS analysis of the intersection of USGS streams layer and the NHDOT road layer identified 599 stream crossing locations not identified in SADES. An effort was made by SNHPC staff to add select missing stream crossing locations in the prioritization scoring exercise in order to provide a more complete dataset for documentation of risk within the region. Because stream crossings exist across a wide range of size, structure, and condition under the responsibility of state, municipal, and private entities, it was important to apply a coarse screen to the task of identifying missing stream crossings and streamline the discovery process. In general, SNHPC staff set out to add missing stream crossings to the prioritization model that are owned by municipalities or were on higher traffic volume roadways since they posed a larger risk to the function of the transportation network.

The following language was used as a guide for discovery and inclusion of missing stream crossings in the prioritization model:

1) Missing crossings identified in close proximity to a local flood hazard shall be included.
   a. Local Flood Hazards are identified in the SADES flood hazards GIS map
2) Missing crossings identified by local asset managers shall be included.
   a. Input documented in Appendix D: Asset Manager Input
3) Missing crossings on class II and III, V may be included in the model.
   a. Where asset managers identified locations on rail lines or trails, they were included.

Prioritization Scoring Context

The scoring criteria were organized by the scale of the data source. Data was arranged starting with federal data, followed by state, then local data resources. The arrangement of data by governmental level allows future users to easily reference the scale and origin of the data used for prioritization. The arrangement of scoring criteria by scale allowed different groups to focus on scoring criteria relevant to their needs. For example, NHDOT may wish to emphasize federal and state level data while NHGS may want to emphasize SADES data, like hydraulic vulnerability. Municipalities may wish to emphasize local asset manager input and locally identified historic flood hazards.

- Data Level 1 – Federal and state data (e.g., road network lines, traffic count data)
- Data Level 2 – Asset data and GIS analysis (e.g., structure condition, hydraulic vulnerability)
- Data Level 3 – Local data (e.g., local flood hazards and asset manager ID'd crossings)

The prioritization scoring determines a score based on the sum of all criteria and ranks them by municipality according to the highest score. For example, if traffic volume, flood zone, hydraulic vulnerability, structure condition, local flood hazards, and asset manager input are all scored as high, then the priority of the stream crossing is greater. The highest possible score for a stream crossing would be 54 out of 54 points (no crossings in the prioritization model achieve this score) while the lowest possible score is 0 (85 crossings have a score of zero).

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RESULTS OF PRIORITIZATION

Prioritization Scoring Results

The Stream Crossing Prioritization Criterion produced a score for each stream crossing within the region documented in the SADES database. Prioritization scoring also included missing crossings identified by asset managers in interviews and from SNHPC staff through a desk review. Table 6 identifies the top 30 stream crossings in the region, ordered by total score.

Table 6: Stream Crossing Prioritization Results

SADES ID	Annual Avg. Daily Trips (AAI	AADT Score	Asset Mgr ID'd Cross	Asset Mgr ID Scor	History of Flood Haz	Hazard Sco	Flood Zone Category (FEM	Zone Score	Culvert Conditi	Condition Scor	10yr Hydraulic Vulnerabi	Vuln. Score (10yr	Culvert Mate	Metal Scor	Beaver Activ	Beaver Score	Total Scor	Town Nam
6232	AADT<5,000	2	Yes	10	Yes	5	Floodway	5	Poor	10	Unknown	3	Metal	2	No	0	37	Derry
5927	AADT<20,000	6	No	0	Yes	5	Floodway	5	Poor	10	Overtop	5	Metal	2	No	0	33	Londonderry
8732	AADT<5,000	2	Yes	10	Yes	5	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	Yes	2	33	Chester
5877	AADT<5,000	2	Yes	10	No	0	Minimal Hazard	0	Poor	10	Overtop	5	Metal	2	No	0	29	Londonderry
196	AADT<30,000	8	Yes	10	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Metal	2	No	0	29	Candia
5464	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	29	Candia
15109	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Fair	5	Vulnerable	4	Not Metal	0	No	0	28	Hooksett
5926	AADT<20,000	6	No	0	Yes	5	Floodway	5	Fair	5	Overtop	5	Metal	2	No	0	28	Londonderry
8255	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	28	Auburn
5190	AADT<20,000	6	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	28	Goffstown
999971	AADT>=30,000	10	No	0	Yes	5	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	28	Derry
901	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	28	Weare
900	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	28	Weare
6868	AADT<10,000	4	Yes	10	Yes	5	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	28	Chester
6804	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	28	Chester
9011	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	27	Bedford
12607	AADT<10,000	4	Yes	10	No	0	100-Year Flood Zone	4	Fair	5	Vulnerable	4	Not Metal	0	No	0	27	Manchester
12556	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	27	Manchester
5053	AADT<1,000	0	Yes	10	Yes	5	Floodway	5	Good	0	Overtop	5	Metal	2	No	0	27	Bedford
999969	AADT>=30,000	10	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	27	Hooksett
10248	AADT<30,000	8	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Overtop	5	Not Metal	0	No	0	27	Hooksett
5930	AADT<20,000	6	No	0	Yes	5	Floodway	5	Fair	5	Vulnerable	4	Metal	2	No	0	27	Londonderry
999955	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	27	Weare
6506	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Poor	10	Not Applicable	0	Metal	2	No	0	27	Chester
192	AADT<20,000	6	No	0	Yes	5	Floodway	5	Poor	10	Not Applicable	0	Not Metal	0	No	0	26	Bedford
6770	AADT<10,000	4	Yes	10	No	0	Floodway	5	Fair	5	Pass	0	Metal	2	No	0	26	Londonderry
7199	AADT<20,000	6	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Overtop	5	Not Metal	0	No	0	25	Windham
999977	AADT<30,000	8	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	25	Manchester
6943	AADT<1,000	0	Yes	10	Yes	5	Floodway	5	Fair	5	Not Applicable	0	Not Metal	0	No	0	25	Windham
15110	AADT<20,000	6	Yes	10	No	0	100-Year Flood Zone	4	Fair	5	Pass	0	Not Metal	0	No	0	25	Hooksett

Each stream crossing has the municipality, crossings ID, and the individual score for each criterion type along with their score values. Crossings with a "999xxx" number represent non-SADES stream crossings. This information is useful for both regional planning efforts and for communication with state and regional agencies such as NHDOT District 5 highway maintenance office.

In order to efficiently share results of the prioritization model with asset managers, the scoring results were formatted into scoring summaries specific to each of the 14 municipalities within the SNHPC region. The prioritization score for all documented stream crossings within each municipality can be found in Appendix E: Scoring Summary and Detail Sheets. The scoring summary for each municipality is accompanied by detail sheets for the highest priority stream crossings which are described in more detail in the High Priority Stream Crossings section of this report.

Maps of stream crossing priority were also produced for each municipality in the region as an additional visual aid. A region-wide map is included in the set. The maps illustrate risk through a gradient of color and size. The lowest risk stream crossings have a small purple dot identifying their location. The highest risk locations have large yellow dots. Every stream crossing located on the map includes their unique SADES Identification number. The prioritized stream crossing maps are found in "Appendix B: Regional Map Set" of this report labelled as "Scored Stream Crossings".

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Stream Crossing Characteristics

Stream crossings throughout the region vary both in character and in the distribution within and among municipalities. Figure 15 shows the percentage distribution of stream crossings in the region. The distribution of crossings is dependent on the geography and development for a given area. For example, Bedford has the most documented stream crossings (216) while Francestown has the lowest number of documented stream crossings (66). The differences are partly attributed to the amount of developed land area and how waterways are organized by topography. Most of Bedford's land area is developed with single family housing with many smaller streams across the landscape. Alternatively, Francestown is largely undeveloped with runoff running to a few streams.

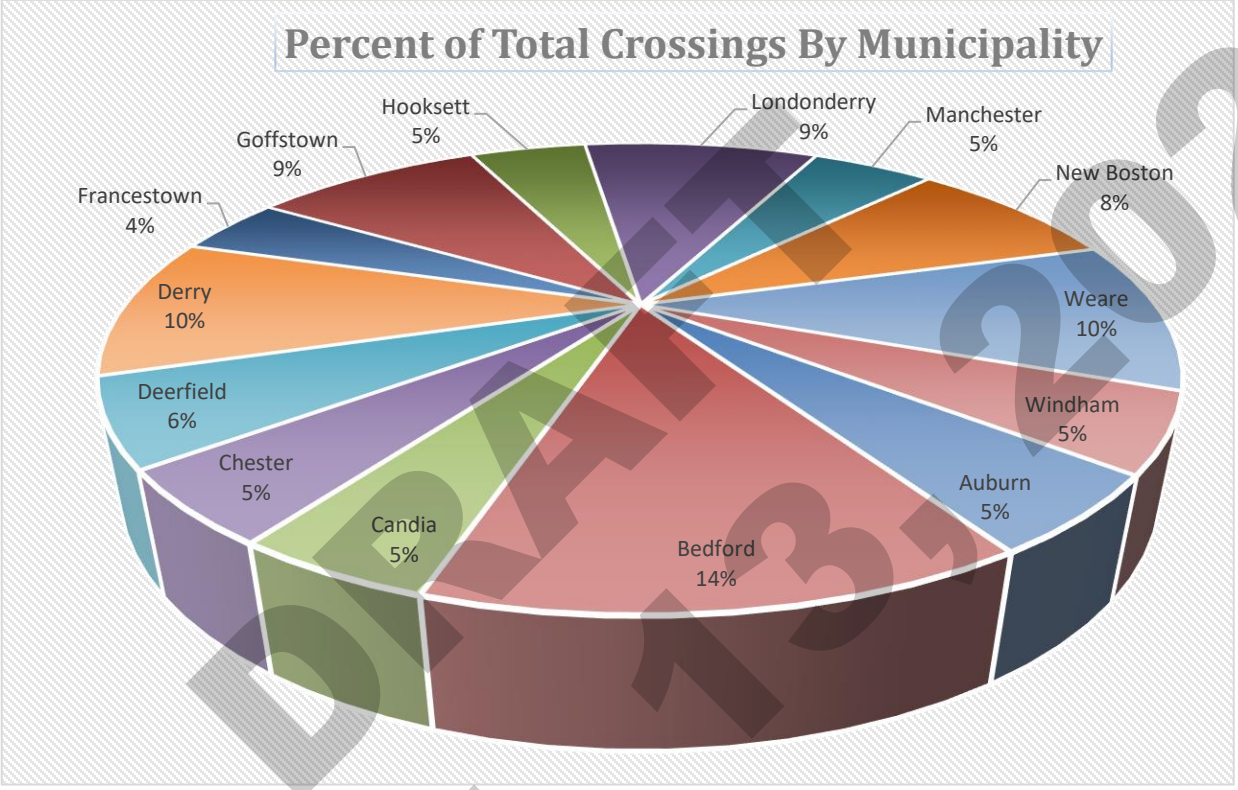


Figure 15: Percent of Total Stream Crossings by Municipality

The majority of documented stream crossings in the project area were in areas of minimal flood hazard (908) while the remaining (679) crossings were in some type of FEMA-identified flood zone. Figure 16 illustrates the stream crossing totals by flood zone category. 364 crossings were associated with some type of prior flooding or Flood Hazard incident. There were 317 documented stream crossings identified as having a metal structure.

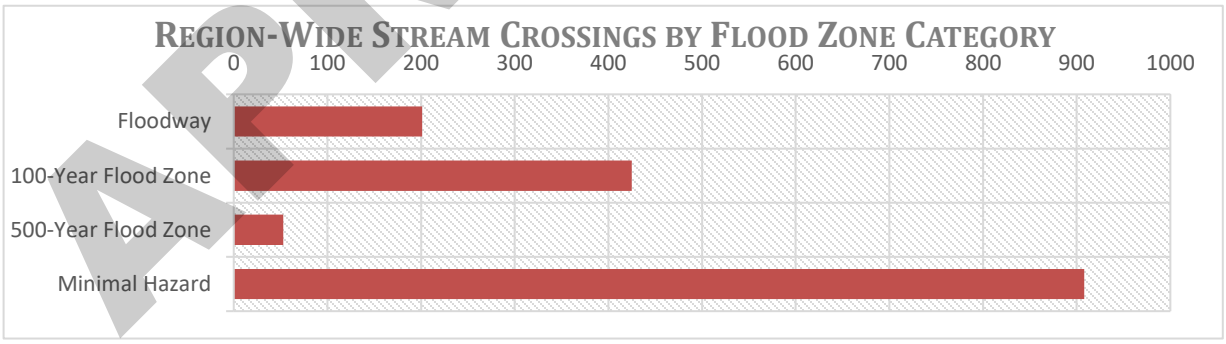


Figure 16: Region-Wide Stream Crossings by Flood Zone Category

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Figure 17 illustrates total stream crossings by condition category. Most stream crossings (1,086) were defined as being in "Good" condition, 188 in "Fair" condition, and 119 in "Poor" condition. 194 stream crossings have an "Unknown" condition either from an inability to complete a SADES protocol field assessment or because a field assessment has not yet been conducted.

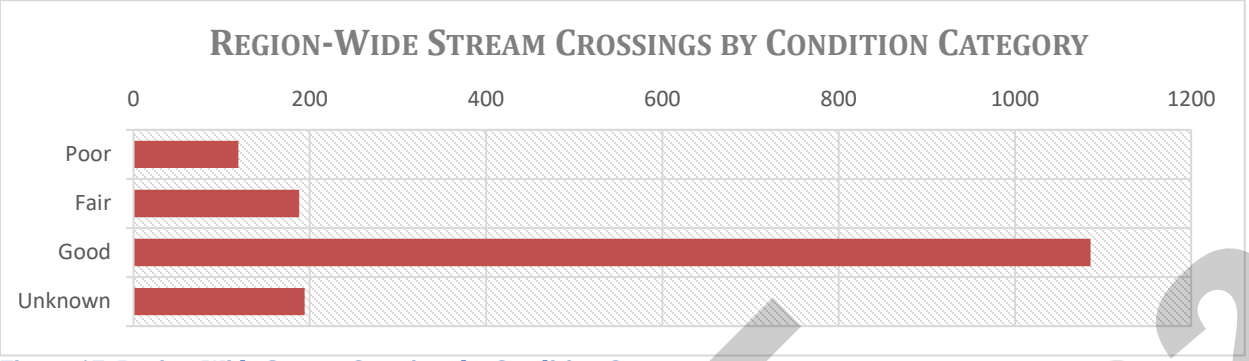


Figure 17: Region-Wide Stream Crossings by Condition Category

Figure 18 breaks down stream crossings by their hydraulic vulnerability for a 10-year magnitude storm event. Ninety-nine (99) of the stream crossings for the region were able to pass through the water flow for a 10-year storm. 84 stream crossings were identified as vulnerable, meaning water elevation projections exceeded the top of the stream crossing inlet but not reaching the elevation of the roadway. 74 stream crossings identified as overtopping the roadway in such a storm event. A significant number of crossings (354) were not applicable to this measure. For example, the hydraulic vulnerablity analysis cannot be applied to stream crossings connecting wetlands or surface water bodies on either side of a roadway. The majority of stream crossings in the region were catagorized as "Unknown" due to incomplete information to conduct analysis.

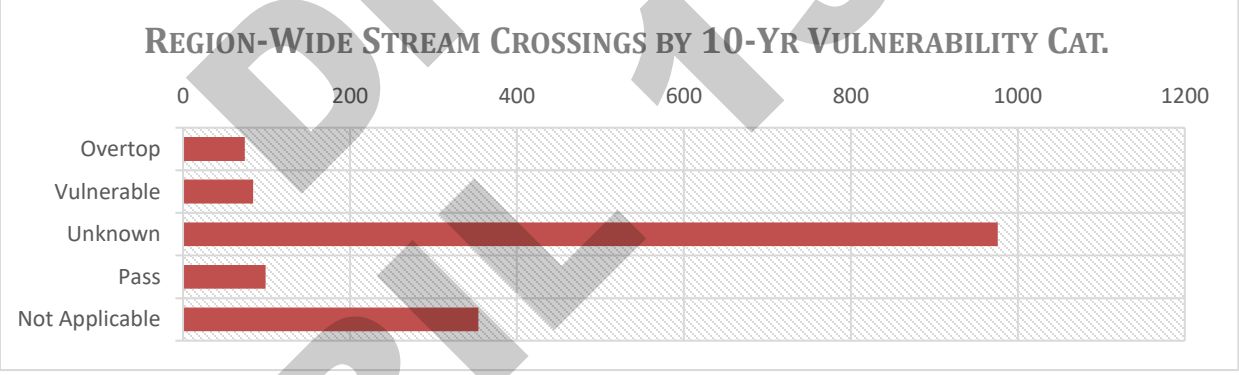


Figure 18: Region-Wide Stream Crossings by 10-Year Storm Event Vulnerability Category

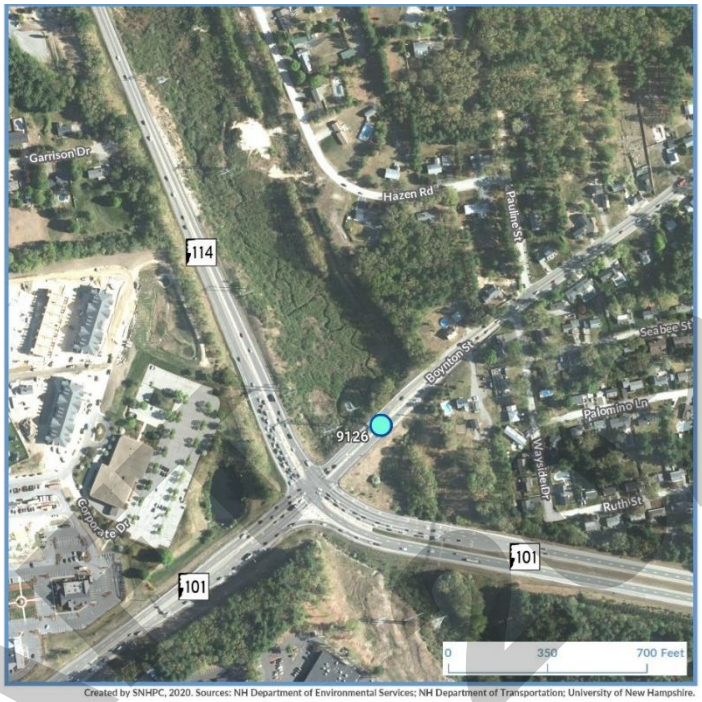
If any of the parameters in the SADES database needed to conduct analysis were missing, this results in the "Unknown" status for Hydraulic Vulnerability. Additionally, all of the 131 stream crossings with a "999xxx" number were also categorized as "Unknown" since no field data has been collected for them yet. A summary of satistical analysis region-wide and for each minicipality is available in Appendix E: Scoring Summary and Detail Sheets.

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HIGH PRIORITY STREAM CROSSINGS

STREAM CROSSING DETAIL SHEETS

The prioritization model's top-scoring crossing locations from each municipality received additional documented detail via sheets similar to the one illustrated in Figure 19. Each detail sheet includes an aerial photo base map with the crossing location marked in blue. The detail sheet includes information on the municipality, SADES ID, and prioritization score. Additional informational details are provided in two columns. The left column includes information used as scoring criteria in the prioritization model such as traffic volumes, hydraulic vulnerability, and structure condition. The right column provides additional contextual information about the stream crossing such as crossing type, road and stream name, structure type, inlet opening size, and the presence of obstruction and the date of field assessment.



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Bedford, NH		Stream Crossing Detail Sheet			SADES ID 9126
Prioritization Score	24	Traffic Volume	<10,000	Crossing Type	Stream
		Asset Manager ID'd	No	Road Name	Boynton Street
		Flood Hazard ID'd	No	Stream Name	No Name
		Flood Zone Category	Floodway	Structure Type	Steel Corrugated Round Culvert
		Culvert Condition	Poor	Crossing Width	7.10'
		10-Yr Hydraulic Vuln.	Unknown	Open Height	7.10'
		Crossing Material	Metal	Obstruction	Deformation of Culvert
		Beaver Activity	No	Assessment Date	08/03/2017

SNHPC
Detail Sheet Created: January 17, 2020

Figure 19: Example of Stream Crossing Detail Sheet (Bedford)

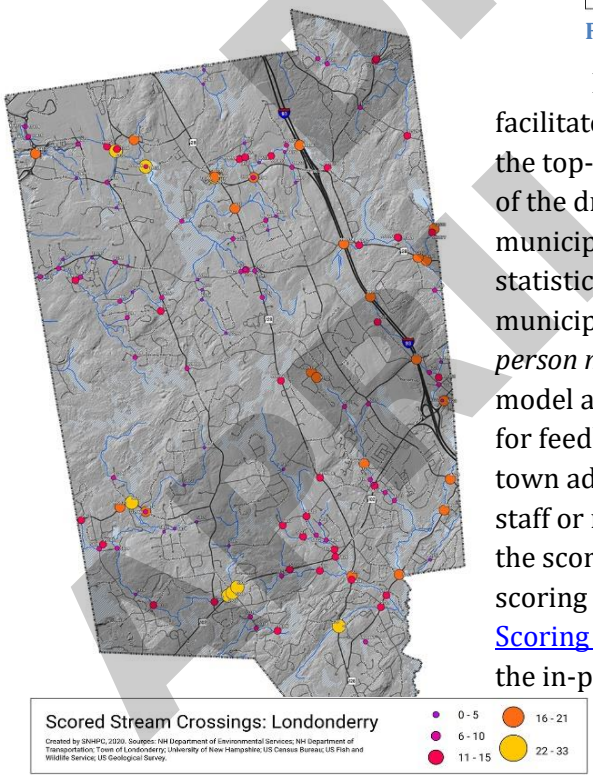


Figure 20: Example of Scored Stream Crossing Map

Draft detail sheets were presented to municipal staff to facilitate dialogue on the nature and extent of potential risk for the top-scoring stream crossings. Figure 20 shows an example of the draft maps SNHPC staff provided draft maps provided to municipal staff while gathering their feedback on the statistical summaries and prioritization results. Of the 14 municipalities within the region, *nine participated in an in-person meeting to review the draft findings* of the prioritization model and stream crossing summaries. SNHPC's solicitation for feedback from municipal staff sought participation from town administrators, emergency managers, and public works staff or road agents. The meeting materials included a draft of the scoring summary for all crossings in a municipality and top scoring stream crossings as documented in Appendix E: Scoring Summary and Detail Sheets. The meeting agenda for the in-person meetings covered information on stream crossing locations and prioritization as documented in Appendix B: Regional Map Set.

DRAFT 10-2020

DECISION-MAKING

PLANNING FOR ACTION IN THE FACE OF CLIMATE CHANGE

Acting in the face of climate change is a challenging endeavor. The historic trends and current projections of climate change identify shifts in the seasons, temperatures, and rainfall for southern New Hampshire. While the certainty of how drastic climate change will be over the next century is not yet clear, the *evidence supports acting today to adapt to the changing conditions*. Over time, global climate models will improve and provide additional certainty in the projection of changes in climate and its impact. Given global climate models currently project an escalation in climate change approximately 30 to 50 years from today, there is time to incorporate mitigation strategy into resiliency efforts. Because most stream crossings will need to be replaced within the next 50 years as part of their normal life expectancy, there is opportunity to replace stream crossings with designs capable of handling higher storm runoff volumes over the coming years. Asset managers should incorporate activities such as planned replacements, funding policy, design modifications, and reinforcement of existing structures as mitigation measures.

Mitigation & Adaptation Strategies

Adaptation of stream crossings should include various strategies to incrementally reduce the vulnerability of the road network over time. Such strategies might include:

1. Accommodation of existing stream crossing infrastructure through retrofits which improve the ability of the road network to withstand increased runoff and elevated stream flow.
2. Design modifications for stream crossings. Hydraulic capacity design calculations can be modified to anticipate larger, more intense rainfall amounts, to ensure future stream crossings are adequately sized for projected climate conditions 60-80 years into the future.
3. Adoption of protective measures designed to prevent or limit impacts. For example, improved upstream headwall or bank armoring, to prevent damage from elevated stream flows.
4. Preservation of undeveloped lands to ensure natural systems can continue to moderate runoff and improve retention/absorption of stormwater in the soil.
5. Stream crossings with repeated impacts that render a roadway impassible during flood events may need to be identified with signage to provide motorists information about the roadway's limitations. Such signage could follow "Pass, Vulnerable, Overtop" from NHDES's Hydraulic Vulnerability categories.

State and Municipal Coordination

NHDOT and local municipalities have a shared responsibility to maintain the road network. This vulnerability assessment identified some potential risks associated with the divisions of responsibility for roadway infrastructure. Locally controlled roadways are reliant on the ability of vehicles to traverse state-maintained roadways which connect the region. Communication between local asset managers, NHDOT staff, elected officials, and the general public can bring to light the potential impacts a stream crossing failure can have on critical state routes. Coordination between state and local representatives would ensure state-controlled high priority stream crossings would be recognized by all stakeholders. Where a stream crossing is identified as having a high potential impact, local and state managers should explore options for a coordinated response and the opportunity for shared resource investment in the event that mitigation action is needed.

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RECOMMENDATIONS

RECOMMENDATIONS FOR ACTION

Municipal Recommendations

Mapping of Stream Crossings: Input from municipal staff resulted in some common themes. Most asset managers aired a desire to be able to filter stream crossings by prioritization scores, by crossing typology, and by entity responsible for maintenance. Asset managers noted this would allow them to utilize the stream crossing inventory as a quick reference tool during maintenance. This translated into a refinement of the Online Prioritization Map provided by SNHPC. New filtering features were added to the map as requested. Additionally, a state-controlled stream crossing prioritization list specific to NHDOT Region 5 is available for use by NH DOT maintenance staff in reviewing risks, planning for maintenance, and identifying capital needs. *

Beaver Activity and Maintenance: Almost every asset manager was able to tell a story about beaver activity or other natural phenomenon resulting in overtopping of a stream crossing. The consistency of these comments lend merit to the need for municipalities to conduct regular assessment and maintenance to clear obstruction from the upstream side of stream crossings. The impermanent nature of beaver dams along with a lack of consistent documentation of beaver activity presented difficulties in including them in the prioritization model, but the relative risk to the road network is still present and having impacts throughout the region. Where municipal staff are conducting regular maintenance activities to remove beaver dams and clear debris from crossings, it is recommended they document those procedures and activities in a way that translates into learning for future adaptation to ensure institutional knowledge is not lost when staff transitions occur. Where staff are not conducting regular preventative checks for obstruction, it is recommended a clearing protocol be established. Clearing of stream crossings prior to an overtopping incident would result in substantial cost savings for municipal road budgets.

Updating Hazard Mitigation Plans: Currently each municipality within the southern New Hampshire region has an up-to-date Hazard Mitigation Plan. It is recommended that each municipality consider including reference to their stream crossing location map, prioritization model results and statistical summary in their local Hazard Mitigation Plan. This information can support stream crossings as an infrastructure class at risk of flooding and as a relevant area of interest for mitigation planning.

Participation in National Flood Insurance Community Rating System: Additionally, communities should consider participation in National Flood Insurance Program's Community Rating System (CRS) if they are not already doing so. CRS is a voluntary incentive program which encourages management of floodplains to reduce flood damage to insurable property. The CRS program strengthens and supports the insurance aspects of the flood insurance program. The system incentivizes good practices for property through discounts of up to 45 percent on flood insurance rates within special flood hazard areas. Good floodplain management will not only protect property but also has the potential to moderate the impacts of runoff for areas downstream. Improvements to upstream floodplains associated with CRS can also result in mitigation of impact to downstream crossings.

*** Note: The towns of Deerfield and Francestown fall outside of NH DOT Region 5, use of this data by Regions 4 and 6 would need to be coordinated with initiatives specific to those regional offices.**

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Capital Improvement Program & Stream Crossing Replacement Schedule: It is recommended that municipalities develop strategic plans for the reinforcement and replacement of stream crossings for the next 30 to 50 years. Stream crossings which are capable of handling between 50-year and 100-year storm events are possible candidates for reinforcement of headwalls and bank armoring as a strategy to adapt to increased runoff and elevated stream flows. Where there is a higher sensitivity to storm events, such as 1-to 5-year frequency vulnerability or a history of overtopping and/or bank erosion, municipalities may consider replacement of stream crossings with ones that have a higher hydraulic capacity. A capital investment plan for stream crossings that identifies the anticipated end-of-life of such infrastructures allows for low impact adaptation. More detailed replacement reports are recommended for inclusion in municipal capital improvement plans. Such an approach to mitigation and adaptation can help communities achieve their resiliency goals without requiring the significant additional capital beyond existing replacement liabilities.

Regional Recommendations

SNHPC Outreach to Communities within the Region: SNHPC, in partnership with its member municipalities, should develop outreach and public awareness content regarding the risk climate change poses to our road network. It is recommended the region utilize outreach materials to build public support for funding investments in adaptation and mitigation actions. SNHPC and municipalities can provide education to elected officials and the general public through a variety of engagement venues. Educating the public of the risks to the road network should emphasize the need for incremental action over the next three to five decades.

Incorporation of Findings into Land Development Studies: The relationship between climate change and land development is becoming more evident as scientists continue to explore the interconnections of natural and man-made systems. Projects such as the "Assessing Flood Risk in the Lamprey River Watershed" is a prime example for modeling the relationships between land development and climate change. The project also models impacts resulting from different land use development patterns and climate change scenarios. As the certainty of such climate modeling improves, a similarly scoped project exploring the linkage between land development, climate change, and flooding will have utility for the SNHPC region. This type of modeling and analysis can better inform decisions-making around land use and infrastructure investments for the region.

Coordination with Regional Long-Range Transportation Planning: Where appropriate, the region should include actions for stream crossing resiliency in its long-range transportation plans. By linking the vulnerability of stream crossings to long range planning, responsible agencies can produce guidelines for prioritizing stream crossing infrastructure during their transportation improvement planning process to ensure future funding appropriately accounts for the risks posed by vulnerable infrastructure and risks posed to the overall health of the transportation network.

NH DOT Outreach: It is recommended SNHPC provide NHDOT Region 5 Highway Maintenance the full benefit of this report and highlight the results of the prioritization model as it relates to state-controlled stream crossings. Many high priority crossings throughout the region are on state-maintained roads. Review and subsequent planning for adaptation and mitigation will create an opportunity for better coordination between DOT and local asset managers. Together local and state agencies can identify collateral risk for each entity in the event of a major flooding event.

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ONGOING PLANNING ACTIVITIES

To continue the work of this Vulnerability Assessment, SNHPC has included tasks associated with data collection of stream crossings, additional analysis of the prioritization model, and additional outreach within the region in its 2020-2021 Unified Planning Work Program.

Stream Crossing Field Data Collection

SNHPC staff will continue to collect in-the-field information for stream crossings missing from the SADES database. Staff will utilize the prioritization model to select at least one (but no more than three) undocumented high priority stream crossings from each municipality to receive a field assessment during the summer season. The assessment data gathered in the field will be added to the SADES database through NHDES/NHGS quality control processes. Where sufficient data can be collected, stream crossings added to the SADES database will receive additional analysis by NHGS to establish an Aquatic Organism Passage (AOP) Score, a Geomorphic Compatibility (GC) Score, and determine the Hydraulic Capacity (HC) of the stream crossing. By collecting the missing locations, SNHPC can actively contribute crucial information about the stream network, resulting in a more complete assessment of the region's stream crossing vulnerability to extreme precipitation.

Prioritization Model Refinement

Development of a statewide Hydraulic Vulnerability rating via GIS model has been in development since 2013. Since NHGS produced Hydraulic Vulnerability ratings for adequately documented stream crossings in 2019, SNHPC was able to consider this rating as a criterion of risk within the stream crossing prioritization model included in this vulnerability assessment. With calculations of hydraulic capacity now available through NHGS, SNHPC will be able to revisit risk assessment of stream crossings by using the Streamworks TU 2.0 model. The Streamworks TU 2.0 model can use global climate scenarios to model the future intensity of precipitation. The hydraulic capacity values output by the Streamworks model can be mapped to illustrate which stream crossings have a higher risk in future years. SNHPC also has the ability to continually refine the prioritization model scoring and make the scoring result publicly accessible via the online prioritization map. SNHPC provided the online map so asset managers would have a tool for viewing and filtering stream crossings by known values such as town name, roadway ownership, and bridge span. Making the map publicly accessible through SNHPC's webpage has the added benefit of ease of access by the general public, furthering interest and support for the topic of stream crossing vulnerability.

Public Engagement and Awareness

In discussions with local asset managers, a lack of funding for stream crossing replacement and maintenance was a common theme, especially in smaller communities. Municipal budgets are faced with competing priorities. Capital expenditures for infrastructure needs such as culvert and bridge replacements are challenging to justify if there is not an urgent and immediate issue observable to the public. Public works staff and road agents have the burden of making a compelling case why incremental investments in adapting stream crossings today will have a positive benefit for communities in the future. The prioritization model provides a visual tool for making the case. The documentation of high-risk conditions allows decision-makers to quickly reference relevant information as they move through the budget process. This document is designed to help communities make the best use of the documented information on stream crossings and climate change when determining priorities for adaptation and mitigation.

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APPENDIX A: HMP MITIGATION ACTION LIST

Table of hazard mitigation plan mitigation actions listed by town for flood type actions only. The table provides additional information about capital improvement plan ranking, problem (cause), or estimated cost where provided by a municipality's hazard mitigation plan report.

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Appendix A: HMP MITIGATION ACTION LIST
FLOOD MITIGATION ACTIONS LISTED BY TOWN

Town	Action Rank	Problem Statement	Mitigation Action	Est. Cost
Auburn (2017)	1	This upgrade will eliminate repetitive flooding and damages to the roadway and adjacent properties.	Upgrade culvert on Old Candia Road	$50k-$100k
Auburn (2017)	8	Hook Road drainage issues	Pave/upgrade Hook Rd and install drainage	$50k-$100k
Auburn (2017)	15	This upgrade will eliminate repetitive flooding and damages to the roadway and adjacent properties.	Upgrade culvert on Maple Farm Rd	$25k-$50k
Auburn (2017)	17	Upgrades will eliminate repetitive flooding and damages to the roadway and adjacent properties.	Encourage State to address flooding issues on Hooksett Rd	$100k or More
Bedford (2015)	5	Notify owners and tenants of potential flooding	Acquire list of floodplain owners list	$10k
Bedford (2015)	6	Provide critical information on floodplain matters	Develop website for floodplain information	$10k
Bedford (2015)	7	Locate stormwater drainage points with GIS maps	Develop stormwater drainage maps	$25k
Bedford (2015)	8	River Stewardship will prevent future flooding	Develop a river stewardship program with communities in the MRWC	No Cost
Bedford (2015)	9	Mapping allows more rapid notification	Map inundation area resulting from dam breach or dam failure	$10k
Bedford (2015)	10	Conservation saves on flood damage expenditures	Pursue conservation of flood prone properties in repetitive loss areas	$300k
Candia (2012)	-	Heavy rains cause erosion and damage culverts (see map for locations).	Upgrade Culverts on North Rd., Critchett Rd., Depot Rd., Main St., Patten Hill Rd. and Old South Road	-
Candia (2012)	-	New development (both commercial and residential) may channel water and create flooding where it hasn't occurred before.	Join the NFIP	-
Chester (2016)	7	Culvert upgrades needed due to flooding issues	Upgrade culverts on Orcutt and North Pond Rd	$10-$25K
Chester (2016)	8	Mitigation is needed for downstream flooding issues from Harantis Lake. State Funding needed	Mitigate downstream flooding issues from Harantis Lake with State DOT assistance	$100k or More
Chester (2016)	9	Mitigation is needed for flooding problems from inadequate culverts on Lane Road	Upgrade multiple culverts on Lane Road	$100k or More
Chester (2016)	11	Beaver activity needs to be monitored seasonally so that culverts and ditches do not get clogged	Support resources to increase Storm Drain Maintenance	Less than $10k
Chester (2016)	12	Stormwater flooding mitigation needed with the replacement of the bridge.	Upgrade/replace Hanson Road Bridge	$500k or More
Chester (2016)	14	Flooding issues at town lines necessitate coordination with neighboring communities.	Continue to coordinate with the Towns of Raymond and Derry regarding flooding issues	Less than $10k
Chester (2016)	15	Multiple culvert upgrades needed in town to mitigate further repetitive flooding	Pursue Hazard Mitigation funding for five culvert upgrades or replacements (Edwards Mills Rd, Halls Village Rd., Rod and Gun Club Rd., Cole Rd, and Harantis Lake Rd)	$2.25M
Chester (2016)	17	Floodplain ordinance is out of date.	Update floodplain zoning ordinance as recommended by NH OSI to comply with national flood insurance program requirements	Less than $10k
Chester (2016)	22	Chester needs a representative on Piscatoquog River Local Advisory Committee	Encourage river steward representative on Piscatoquog River Local Advisory Committee	Less than $10k
Deerfield (2013)	6	Ongoing, more diligent enforcement needs to be followed through by departments	Assess whether town specific erosion /sediment control regulations and guidelines are needed	Less than $10k
Deerfield (2013)	10	High incidence of residents with floodplain boundary issues since the FIRMs were updated.	Outreach and Education on NFIP and Flood Insurance Rate Maps (FIRMs)	Less than $10k
Derry (2015)	4	Improved floodplain management	Continue to prohibit construction in the floodplain during review & permitting process	No Cost
Derry (2015)	7	Improved floodplain management	Continue to participate and comply with the NFIP and consider participation in the CRS	Less than $10k
Derry (2015)	10	Reduce flooding conditions	Improve drainage structures Folsom and N. High. Also Tsienneto and NH Rt. 102.	$100k
Derry (2015)	11	Reduce flooding conditions	Continue to implement culvert analysis for inventory and condition assessment	Less than $10k
Derry (2015)	12	Reduce flooding conditions	Continue to implement a culvert maintenance system	$10k-$50k
Derry (2015)	14	Reduce flooding conditions	Continue maintenance program for detention/retention ponds	Less than $10k
Derry (2015)	15	Reduce flooding losses	Continue to encourage property owners to elevate structures in the floodplain, especially insured and repetitive loss properties	Less than $10k
Derry (2015)	16	Reduce flooding conditions	Encourage ConCom Commission to become active in acquiring floodprone properties	$100k or More

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Appendix A: HMP MITIGATION ACTION LIST
FLOOD MITIGATION ACTIONS LISTED BY TOWN

Town	Action Rank	Problem Statement	Mitigation Action	Est. Cost
Derry (2015)	23	Improved information on river heights during floods	Install visual river gauges at known points of repetitive floods	Less than $10k
Derry (2015)	25	Public information for properties along flood prone areas	Implement public outreach campaign to property owners along floodprone areas	Less than $10k
Francestown (2014)	-	-	Continue to remain in compliance with the National Flood Insurance Program	No Cost
Francestown (2014)	-	-	The town will continue to update the Capital Improvement Plan, Master Plan, and Zoning Ordinance to provide protection for new buildings from flooding and other relevant hazards where necessary	$10k
Francestown (2014)	-	-	Check status of dams prior to potential heavy storm events	No Cost
Francestown (2014)	-	-	Check culverts and bridges prior to heavy storm events	No Cost
Francestown (2014)	-	-	Prepare a written storm drain system maintenance program	
Francestown (2014)	-	-	Culvert-Bridge Replacement and Upgrade Plan. (Town-Wide)	Less than $1m
Francestown (2014)	-	-	Improve road and ditching; construct and upgrade culverts where needed.	Less than $200k
Goffstown (2015)	High	Existing system is out of date and does not adequately warn the general public in event of a hazard.	Improve the town's existing Flood Warning System and incorporate Code Red warnings	Less than $10k
Goffstown (2015)	High	Existing plans are old and out of date and need to be updated and improved	Update existing plans for dam breach and failures (such as Gregg Falls Dam) and incorporate into Town Plans, such as Master Plan and Emergency Operations Plan.	Less than $10k
Goffstown (2015)	High	Location of existing gauge does not provide adequate notice of rising flood waters	Work with U.S. Army Corp of Engineers to establish a new or relocated existing flood gauge at the New Boston/Goffstown line.	Less than $10k
Goffstown (2015)	High	Henry and Main Street Bridges have been scheduled by Town for upgrade prior to 2009 Plan	Upgrade/improve critical bridge crossing the Piscataquog River (Henry Bridge and Main St)	$100k or More
Goffstown (2015)	High	The Town has no comprehensive plan for addressing debris impacted infrastructure	Write a Debris Management Plan for the Town	Less than $10k
Goffstown (2015)	Medium	Many existing stream crossings fail to pass 25, 50 and 100-year storms and severe storm events	Improve storm water capacity and prioritize upgrades to town's culverts and stream crossings using new Culvert Vulnerability and Assessment data and findings	Less than $10k
Goffstown (2015)	Medium	There are no procedures for how town staff should enforce this ordinance	Develop enforcement guidelines and provisions for town staff in Flood Hazard Overlay District	Less than $10k
Goffstown (2015)	Medium	The effectiveness of town's existing 100-foot buffer requirement needs to be verified	Examine existing requirements for wetland buffers to determine effectiveness at protecting wetlands and water resources	Less than $10k
Goffstown (2015)	Medium	There is limited to no public awareness or understanding of the impacts of debris impacted infrastructure	Improve public awareness and education on debris management after storm events around private property	Less than $10k
Goffstown (2015)	Medium	Town has never had a comprehensive floodplain management plan to guide and direct improvements to floodplain areas	Develop a Floodplain Management Plan for the Town	Less than $10k
Goffstown (2015)	Medium	A plan is needed to help town address EPA's MS 4 requirements for storm water	Develop a Storm Water Runoff Plan for the Town. Incorporate into relevant town plans, such as Master Plan and MS-4 plans for EPA	Less than $10k
Goffstown (2015)	Medium	Many rivers and streams are impacted by litter/trash and other various types of debris which block flow of water during storms	Work with PRLAC to develop a voluntary river stewardship program for river maintenance and to control debris and sediment	Less than $10k
Goffstown (2015)	Medium	The Town has very limited Low Impact Development (LID) BMPs to guide land development and minimize erosion risks	Develop site and building standards to minimize erosion risks within the town	Less than $10k
Goffstown (2015)	Medium	Purchasing flood prone land will help to reduce flood damage and repetitive insurance claims	Encourage Conservation Commission and Town to pursue purchase of flood prone properties	$100k or More
Goffstown (2015)	Medium	The last CAV Report for Goffstown was prepared on May 14, 2009. Participation in this rating system is important to FEMA	Participate in Community Rating System through NFIP for reduced insurance rates to citizens.	Less than $10k
Goffstown (2015)	Low	Federal EPA stormwater management requirements are increasing and passing costs for compliance to municipalities with limited funding	Establish a Storm Water Utility Fee	Less than $10k
Goffstown (2015)	Low	Participation in NFIP and FEMA requires ongoing education and communication	Educate property owners within flood zones on participating in the National Flood Insurance Program.	Less than $10k

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Appendix A: HMP MITIGATION ACTION LIST
FLOOD MITIGATION ACTIONS LISTED BY TOWN

Town	Action Rank	Problem Statement	Mitigation Action	Est. Cost
Hooksett (2015)	3	Continual flooding of properties in SFHA	Continue CC initiatives to purchase flood prone properties in the SFHA	$100k or More
Hooksett (2015)	4	Flooding caused by inadequate culverts	Retrofit and upgrade problem culverts	$100k or More
Hooksett (2015)	5	Flooding caused by storm drains	Improve storm drain maintenance	Less than $10k
Hooksett (2015)	12	Participation CRS will save money	Evaluate and participate in FEMA CRS and appoint NFIP administrator	Less than $10k
Hooksett (2015)	21	Identify the vulnerabilities of culverts	Evaluate and consider utilizing culvert GIS-based hydraulic capacity model to determine culvert vulnerabilities.	$10k-$50k
Londonderry (2015)	5	Educational materials for flood prone areas and emergency preparedness, response etc. deferred from 2010	Outreach to be consolidated with other actions as part of a comprehensive hazard mitigation / public education outreach effort	-
Manchester (2018)	1	-	Continue the separation of Combined Sewer Overflows as part of the Supplemental Environmental Projects Program in Manchester.	$150M
Manchester (2018)	3	-	Extend sewer service to areas with onsite sewage disposal systems (install remainder of the trunk line interceptors only at this time)	$6M
Manchester (2018)	8	-	Upgrade culverts at Ray Brook crossing River Road and Elm Street as they are inadequate	$100k or More
Manchester (2018)	9	-	Upgrade Queen City Bridge, the Notre Dame Bridge and the Amoskeag Bridge to meet seismic design standards as funds become available	$1M
Manchester (2018)	10	-	Add flood logs/improve drainage at Central High School	Less than $100k
Manchester (2018)	14	-	Explore Hazard Mitigation funding for structural renovations to bridges to mitigate debris-impacted infrastructure	$100k or More
Manchester (2018)	19	-	Flood proofing for selected historic Amoskeag mill buildings prone to repetitive flooding.	$100k or More
New Boston (2016)	1	-	Upgrade culvert on Bedford Road.	$85k
New Boston (2016)	6	-	Continue to enforce floodplain regulations, including substantially improved structures; and amend regulations as necessary per federal requirements.	No Cost
New Boston (2016)	13	-	Participate in the Community Rating System (CRS) which potential reduces premiums for flood insurance policy holders.	No Cost
Weare (2018)	3	River Road is one of the few evacuation routes in Weare. The Road has culverts that will need replacement in the near future.	Upgrade River Road	More than $2M
Weare (2018)	4	The replacement of an inadequate culvert on Lull Road was diverted in order to repair the River Road Bridge. An upgraded culvert is needed.	Upgrade Culvert on Lull Road	$500k or More
Weare (2018)	17	Ensure homeowners are aware and have access to NFIP information	Provide NFIP information/brochures at Town Hall and links on the town website	No Cost
Windham (2013)	2	-	Provide/Construct a secondary egress for the Town Safety Complex	$350/LF
Windham (2013)	7	-	Upgrade culverts on Nashua Road and Castle Hill Road	$235k
Windham (2013)	6	-	Upgrade culverts on Doiron Road, Rowe Road, Roulston Road, East Nashua Road, Lowell Road and Castle Hill Road.	-
Windham (2013)	9	-	Identify structures and infrastructure located in the dam inundation pathway of South Road Dam in Londonderry and Seavey Dam in Windham.	-
Windham (2013)	15	-	Purchase a winch for police to remove debris and obstacles.	-
Totals	**81 Flood Themed Mitigation Actions**		**Representing approximately $9M - $14M in outlaid mitigation action.**	(Excludes $156M in Manchester Sewer Outlay)

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APPENDIX B: REGIONAL MAP SET

Maps illustrating the location of stream crossings, the extent of ponding upstream of crossings, and the prioritization of stream crossings based on their vulnerability. Maps are ordered alphabetically by municipality.

LIST OF MAPS

Region Wide:

1. Stream Crossings (Locations)
2. Scored Stream Crossings (Priority)

Auburn:

3. Stream Crossings
4. Scored Stream Crossings

Bedford:

5. Stream Crossings
6. Scored Stream Crossings

Candia:

7. Stream Crossings
8. Scored Stream Crossings

Chester:

9. Stream Crossings
10. Scored Stream Crossings

Deerfield:

11. Stream Crossings
12. Scored Stream Crossings

Derry:

13. Stream Crossings
14. Scored Stream Crossings

Francestown:

15. Stream Crossings
16. Scored Stream Crossings

Goffstown:

17. Stream Crossings
18. Scored Stream Crossings

Hooksett:

19. Stream Crossings
20. Scored Stream Crossings

Londonderry:

21. Stream Crossings
22. Scored Stream Crossings

Manchester:

23. Stream Crossings
24. Scored Stream Crossings

New Boston:

25. Stream Crossings
26. Scored Stream Crossings

Weare:

27. Stream Crossings
28. Scored Stream Crossings

Windham

29. Stream Crossings
30. Scored Stream Crossings

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Stream Crossings: SNHPC

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

Identified by asset managers

SNHPC

0 0.75 1.5 3 4.5 6 Miles



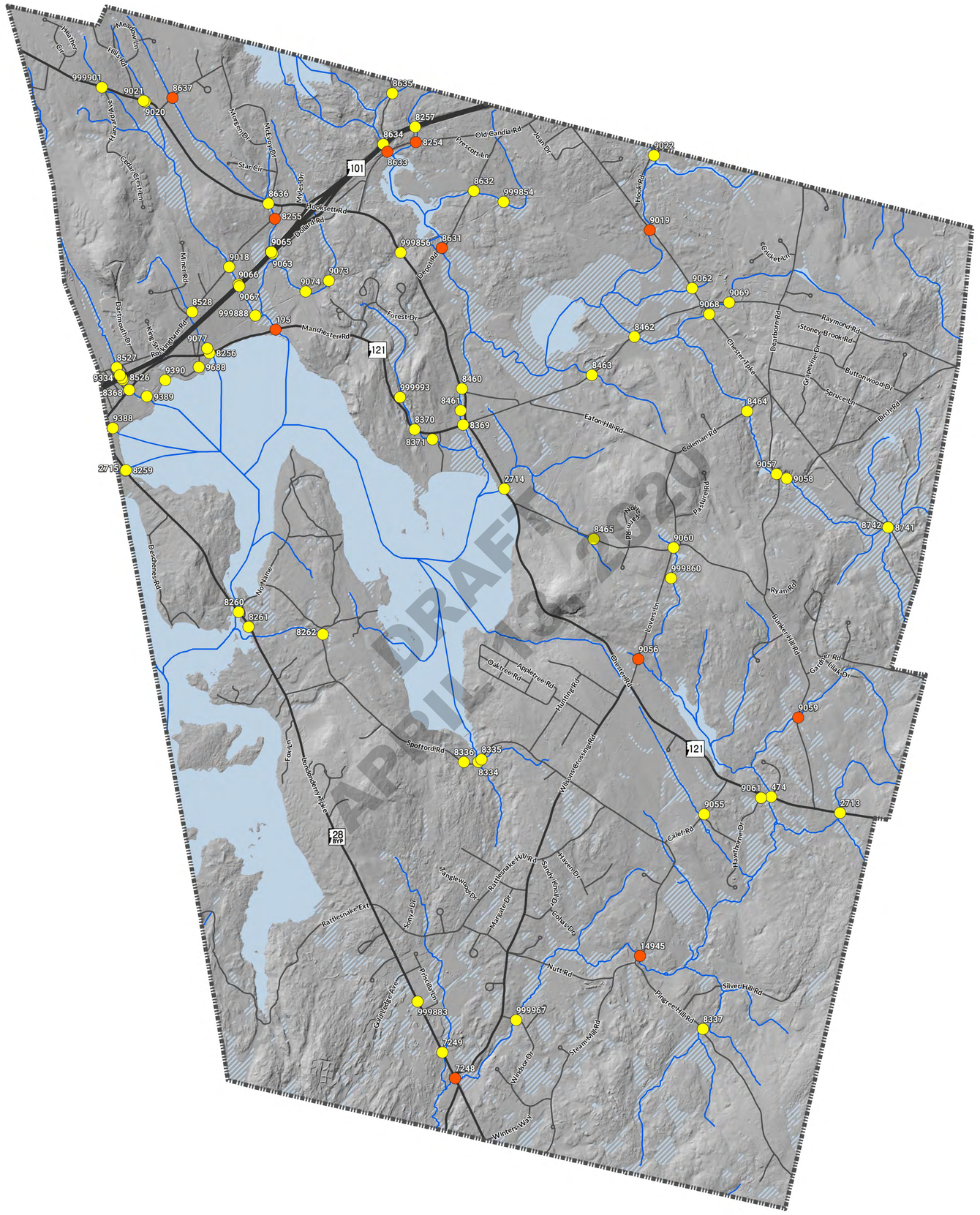
Scored Stream Crossings: SNHPC

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

- 0 - 5
- 6 - 10
- 11 - 16
- 17 - 22
- 23 - 37

SNHPC

0 0.75 1.5 3 4.5 6 Miles



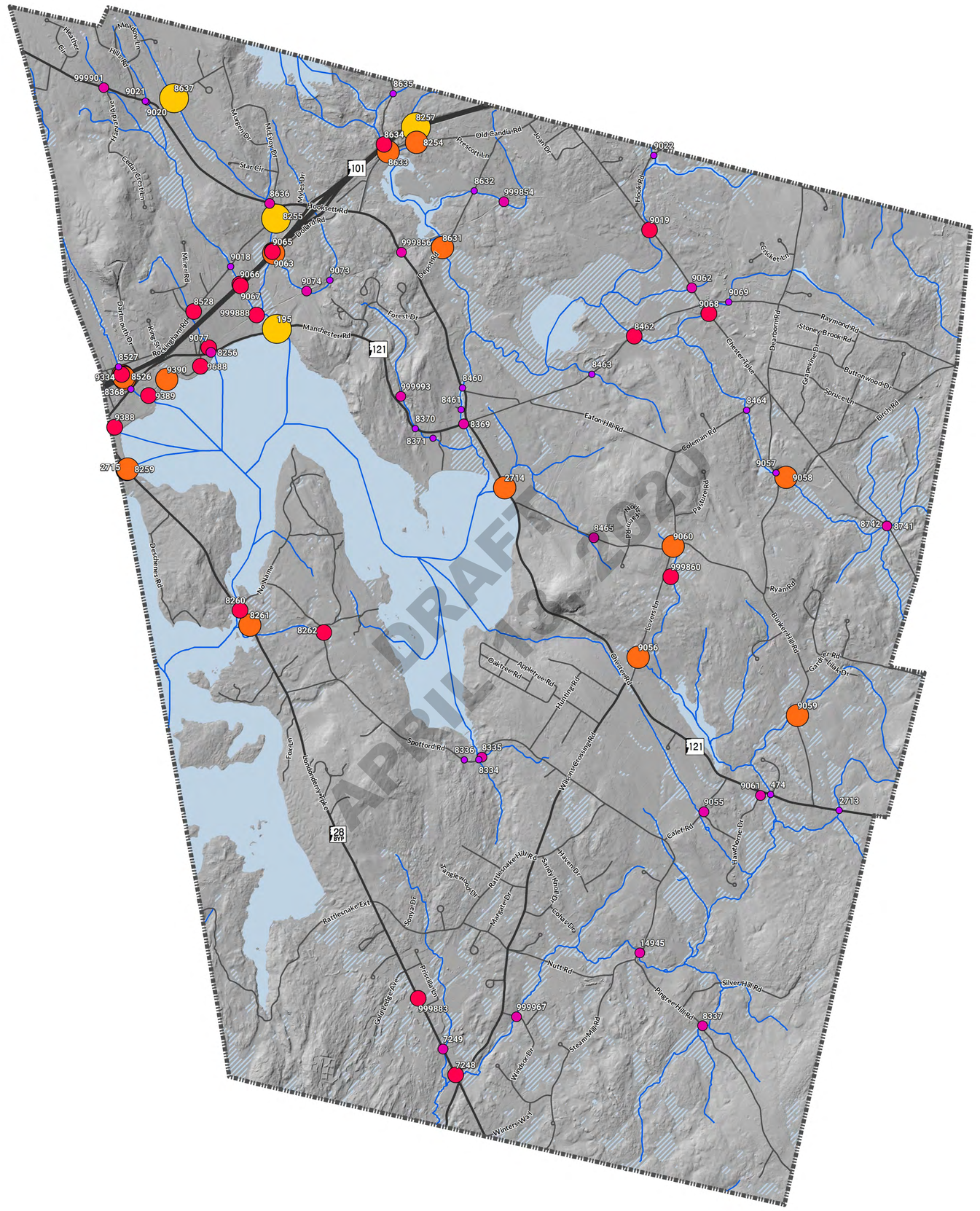
Stream Crossings: Auburn

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Auburn; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

Identified by asset managers

SNHPC

0 0.25 0.5 1 1.5 2 Miles



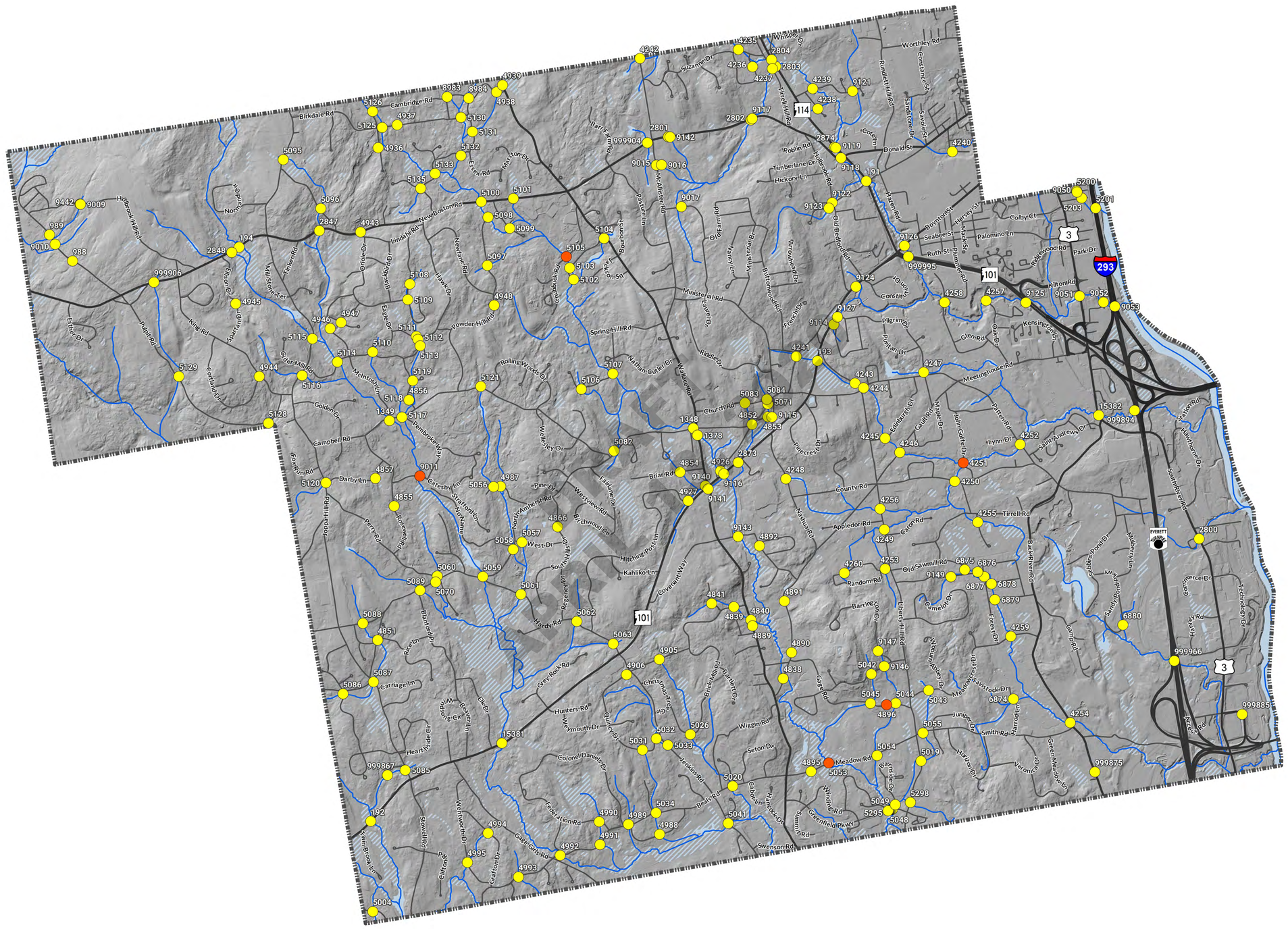
Scored Stream Crossings: Auburn

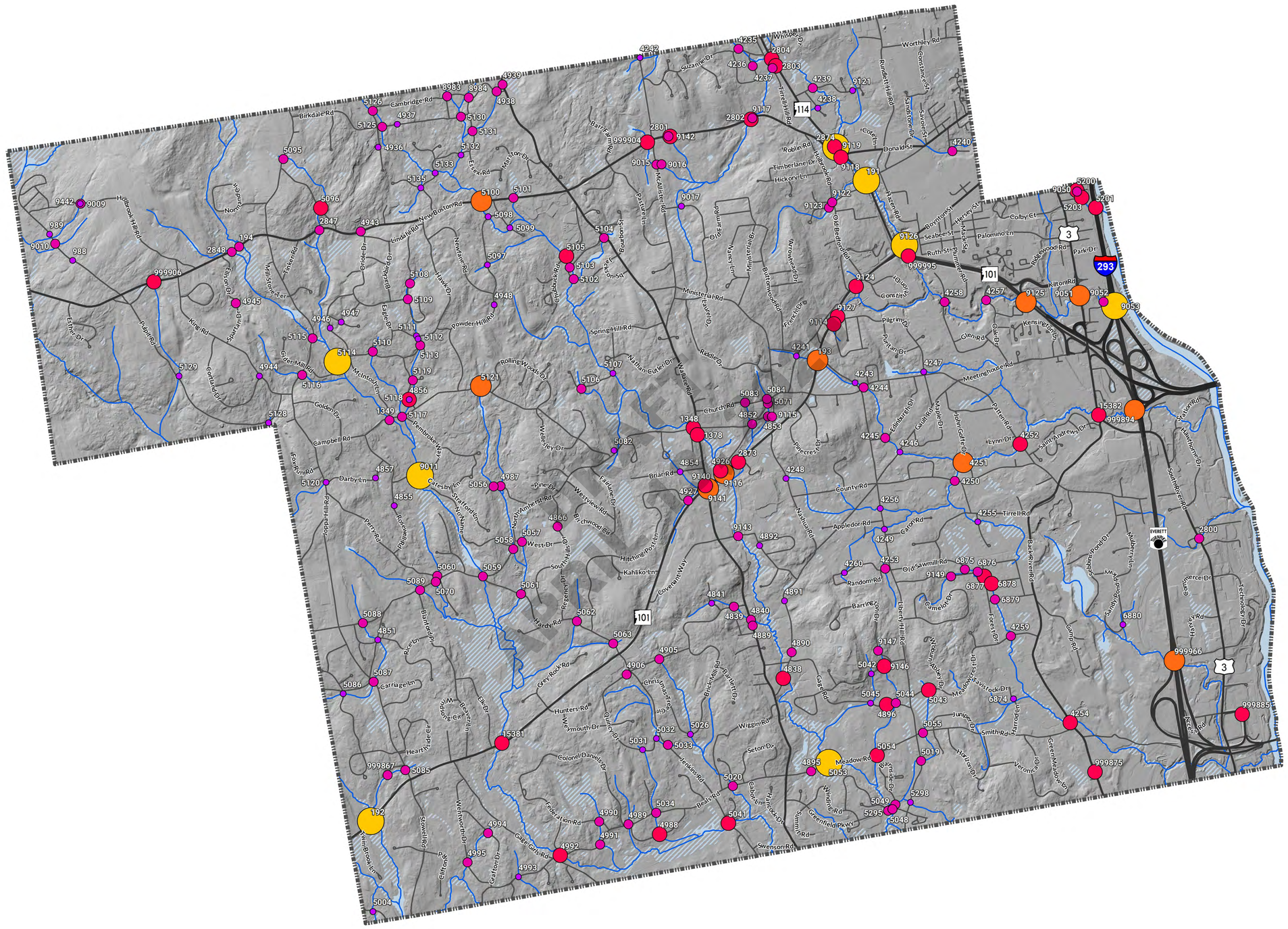
Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Auburn; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

- 0 - 5
- 6 - 10
- 11 - 14
- 15 - 18
- 19 - 28

SNHPC

0 0.25 0.5 1 1.5 2 Miles


Stream Crossings: Bedford
Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Bedford; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.
Identified by asset managers
SNHPC
0
0.25
0.5
1
1.5
2
Miles



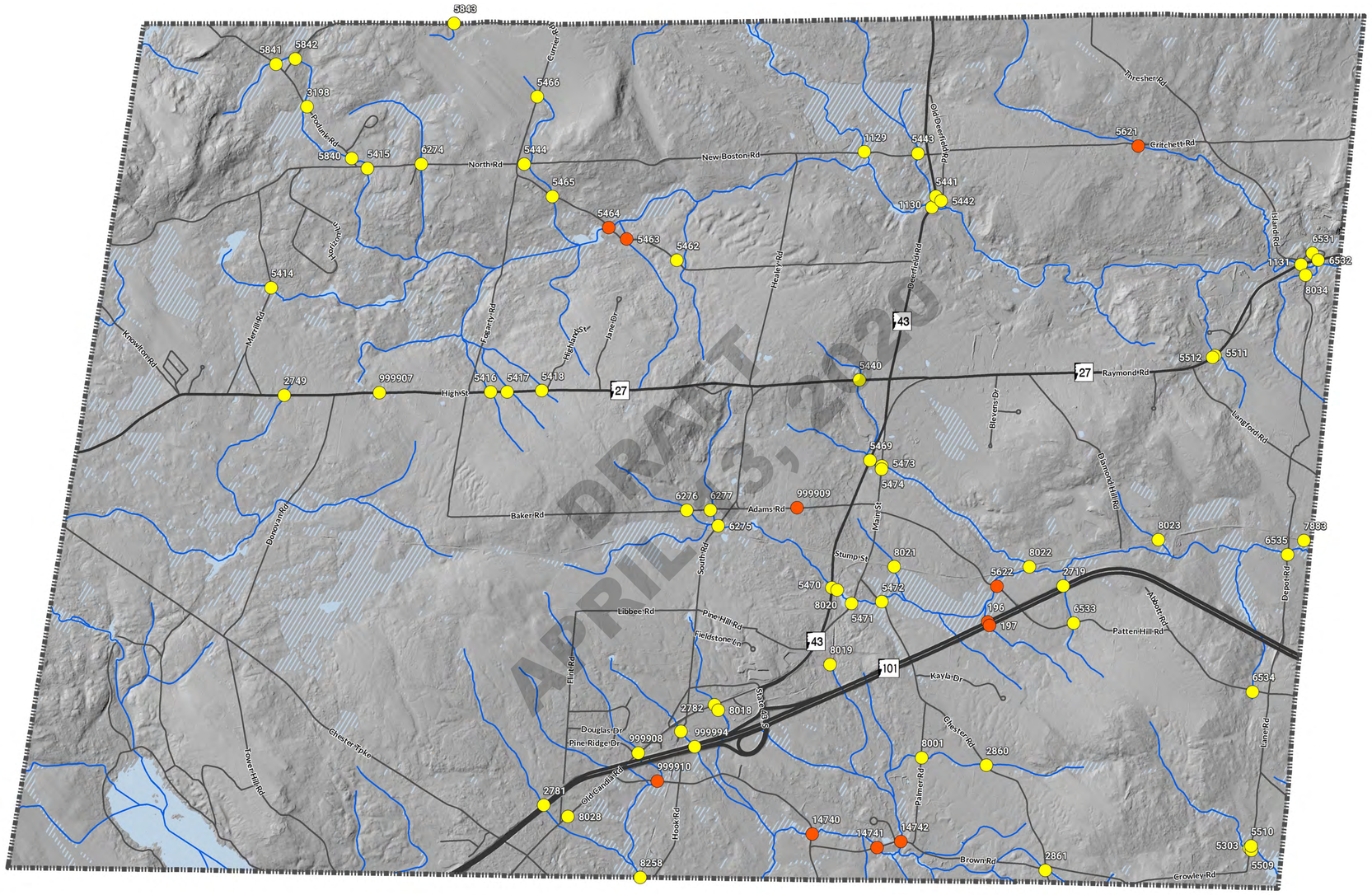
Scored Stream Crossings: Bedford

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Bedford; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

- 0 - 3
- 4 - 9
- 10 - 16
- 17 - 22
- 23 - 27

SNHPC

0 0.25 0.5 1 1.5 2 Miles



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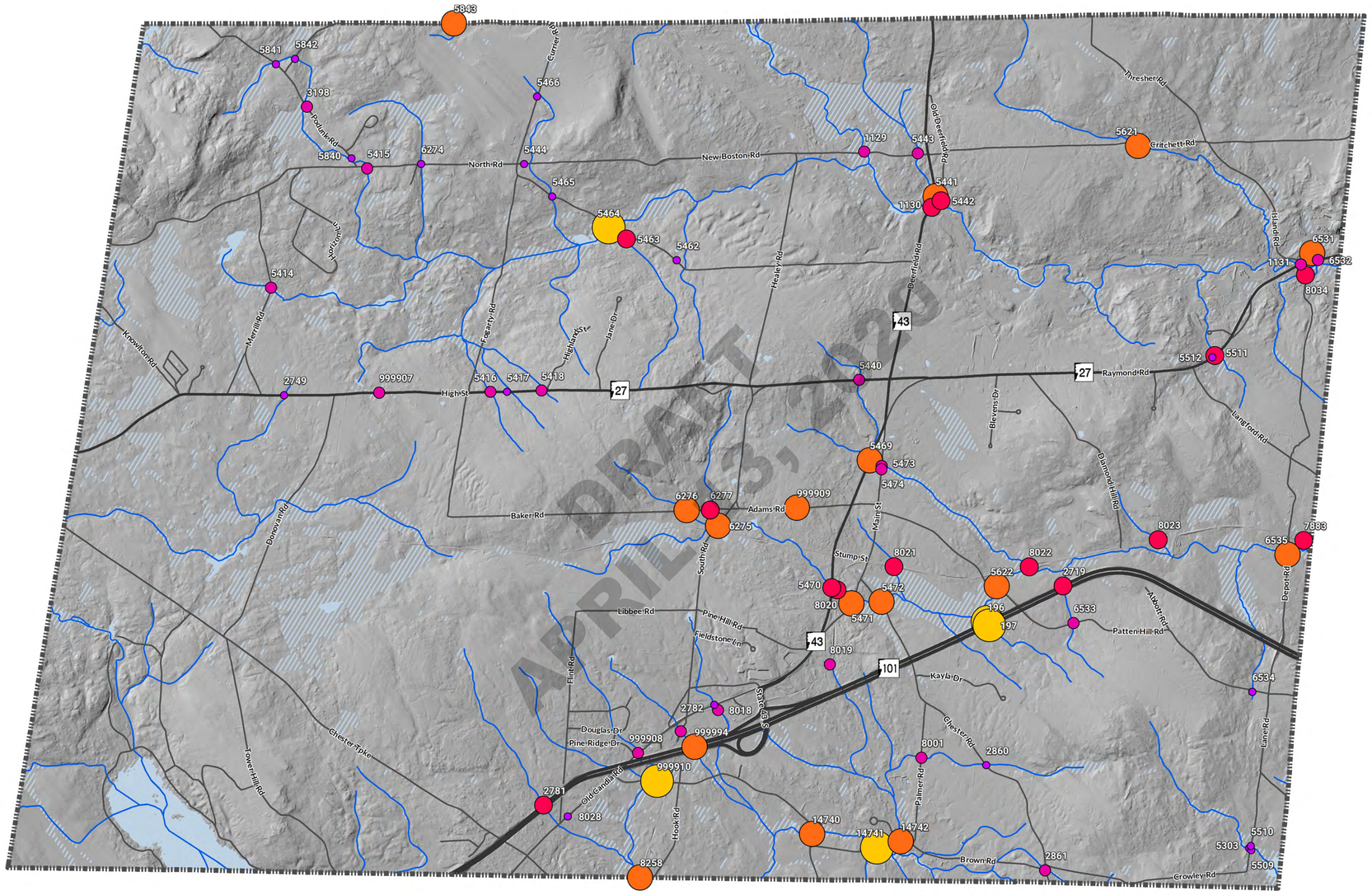
Stream Crossings: Candia

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Candia; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

Identified by asset managers

SNHPC

0 0.25 0.5 1 1.5 2 Miles



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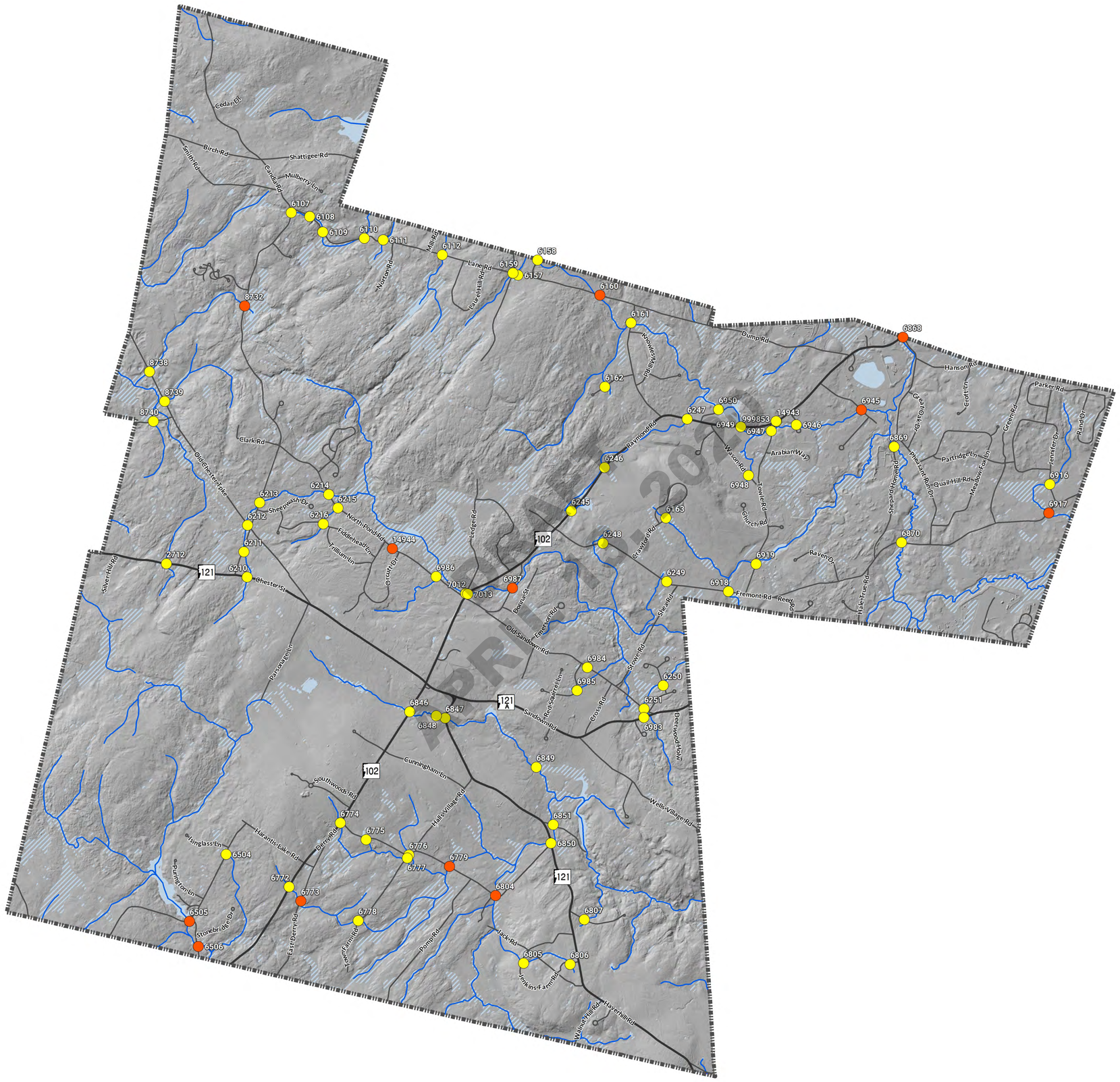
Scored Stream Crossings: Candia

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Candia; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

- 0 - 5
- 6 - 10
- 11 - 14
- 15 - 21
- 22 - 29

SNHPC

0 0.25 0.5 1 1.5 2 Miles



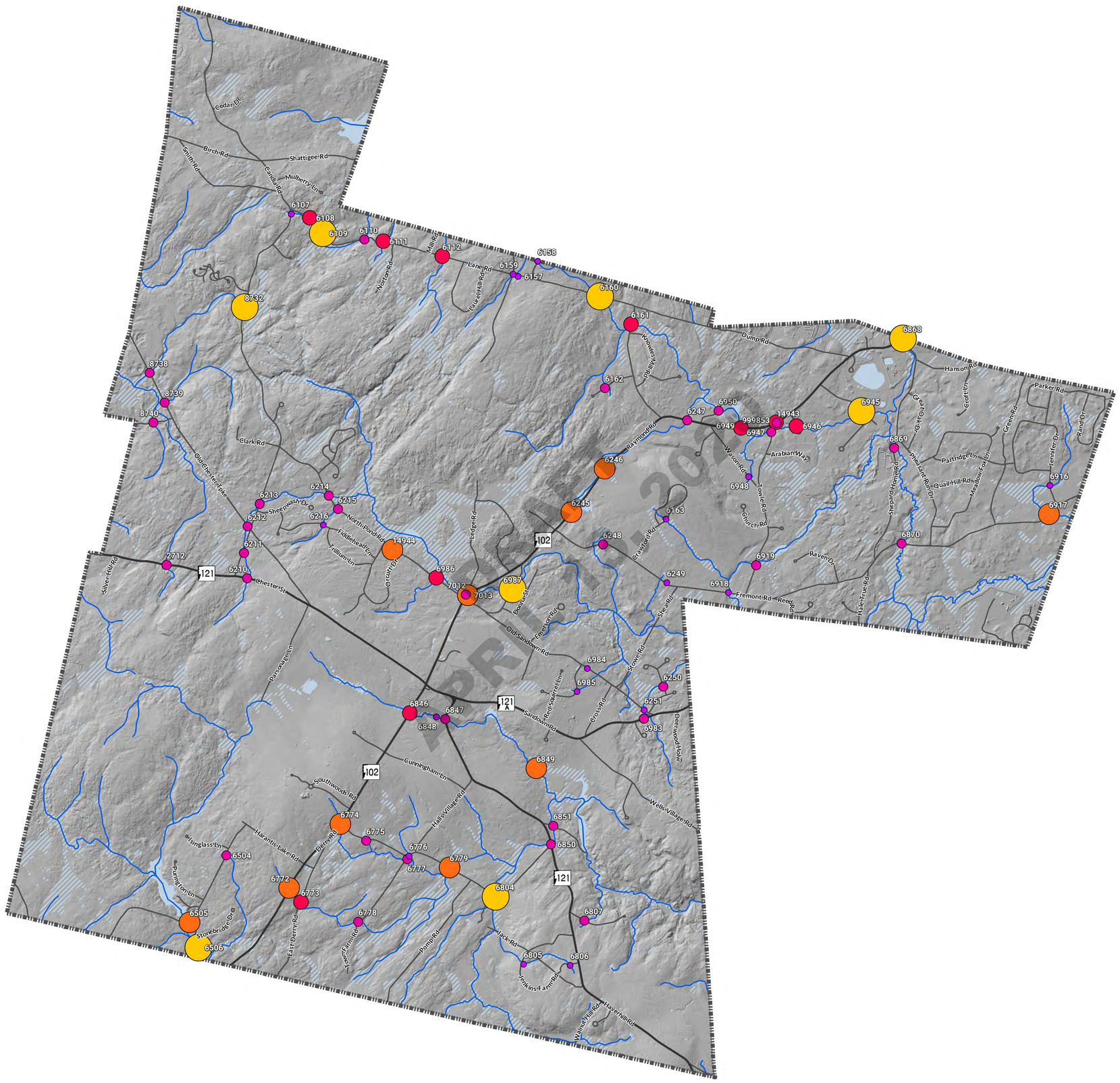
Stream Crossings: Chester

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Chester; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

Identified by asset managers

SNHPC

0 0.25 0.5 1 1.5 2 Miles



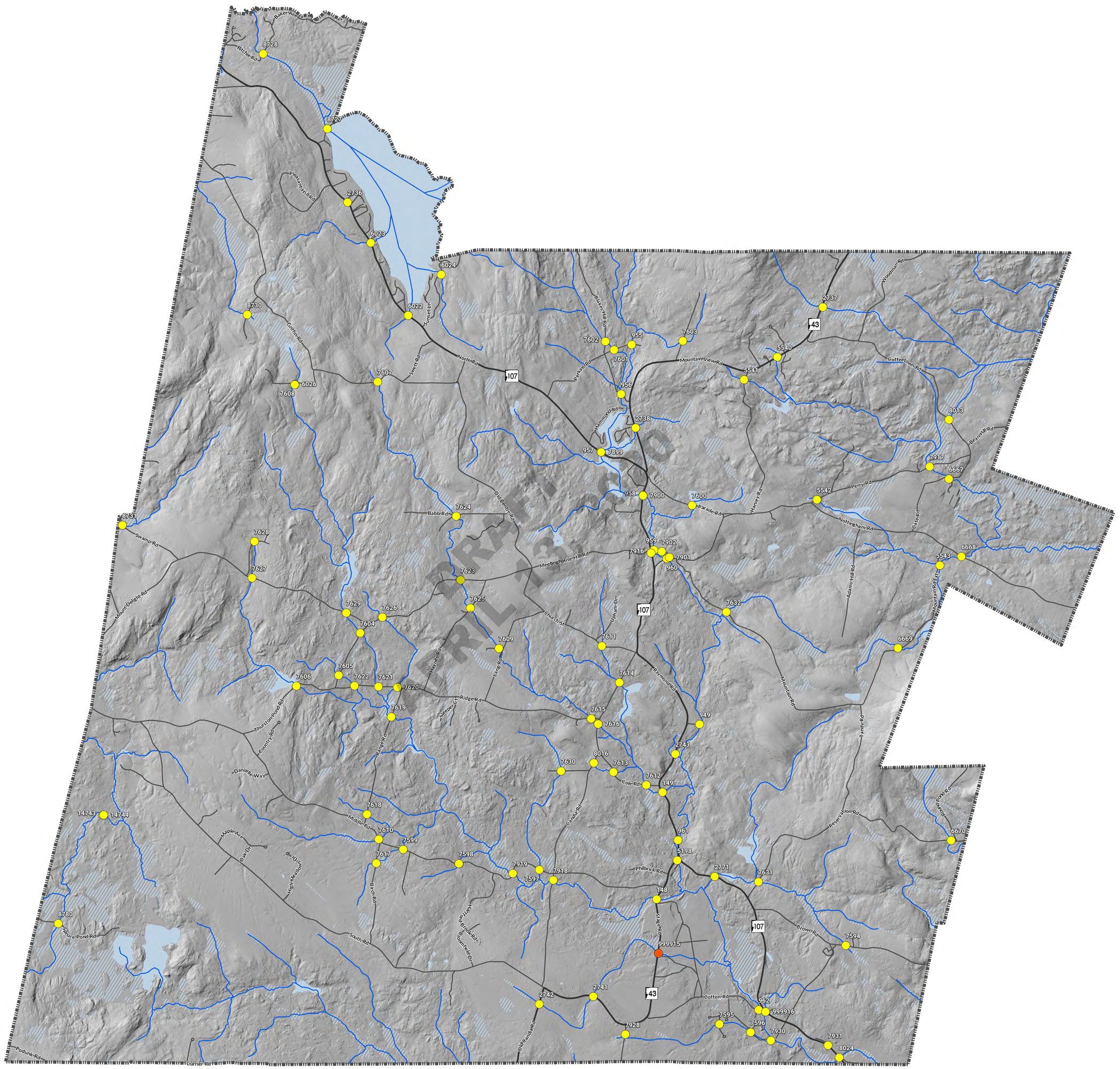
Scored Stream Crossings: Chester

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Chester; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

- 0 - 3
- 4 - 9
- 10 - 15
- 16 - 22
- 23 - 33

SNHPC

0 0.25 0.5 1 1.5 2 Miles



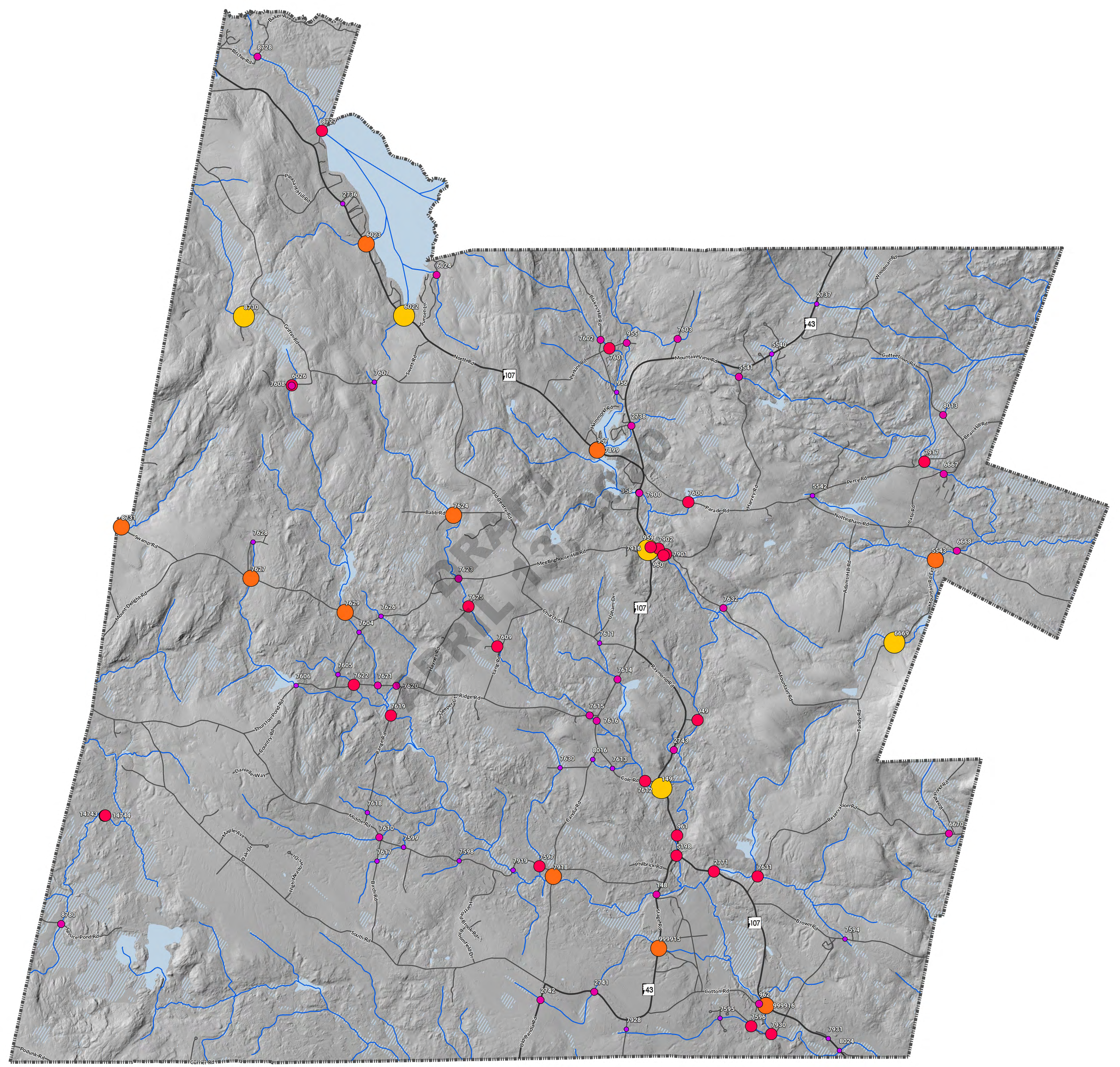
Stream Crossings: Deerfield

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Deerfield; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

Identified by asset managers

SNHPC

0 0.25 0.5 1 1.5 2 Miles



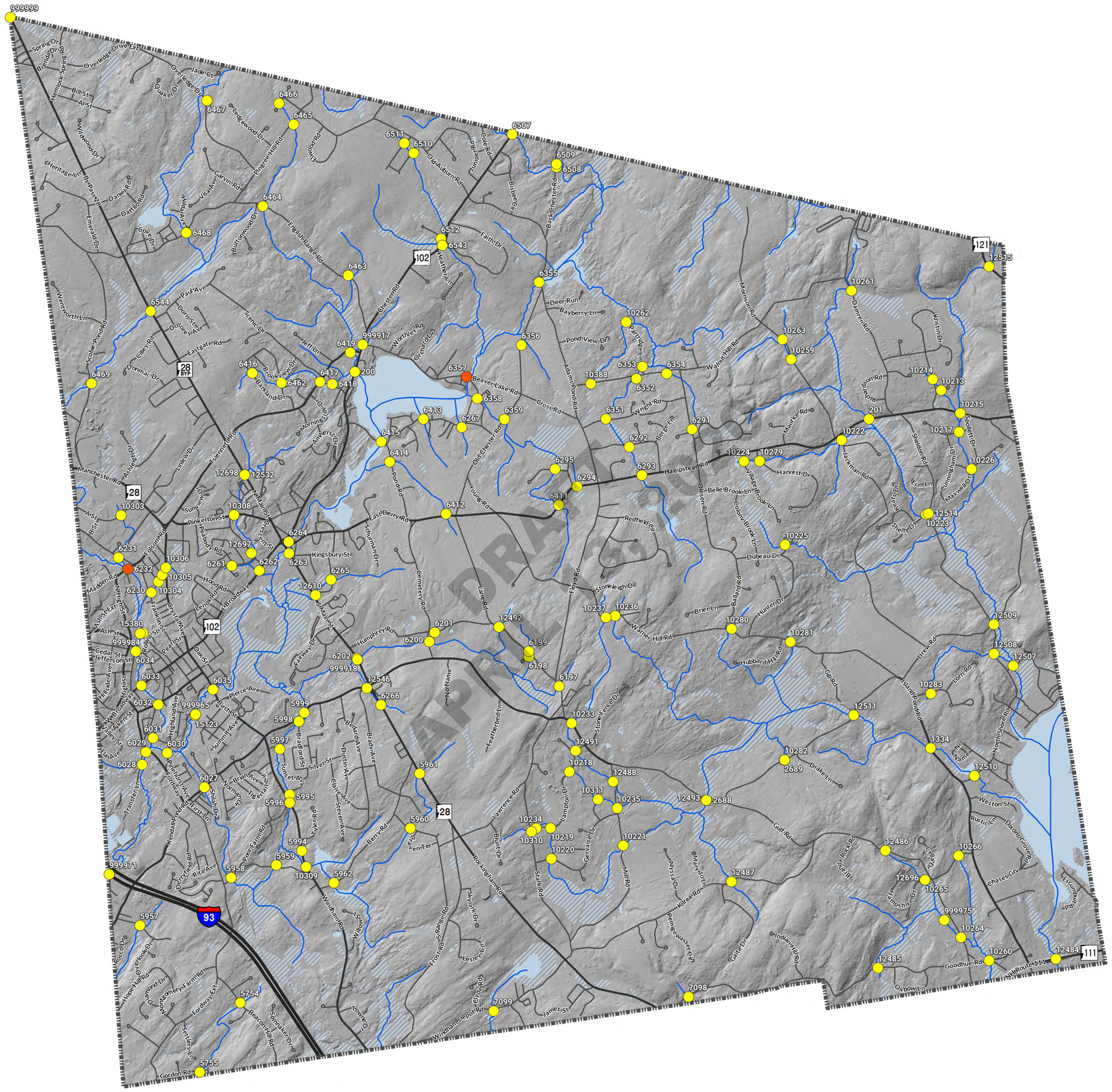
Scored Stream Crossings: Deerfield

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Deerfield; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

- 0 - 6
- 7 - 10
- 11 - 15
- 16 - 20
- 21 - 25

SNHPC

0 0.25 0.5 1 1.5 2 Miles



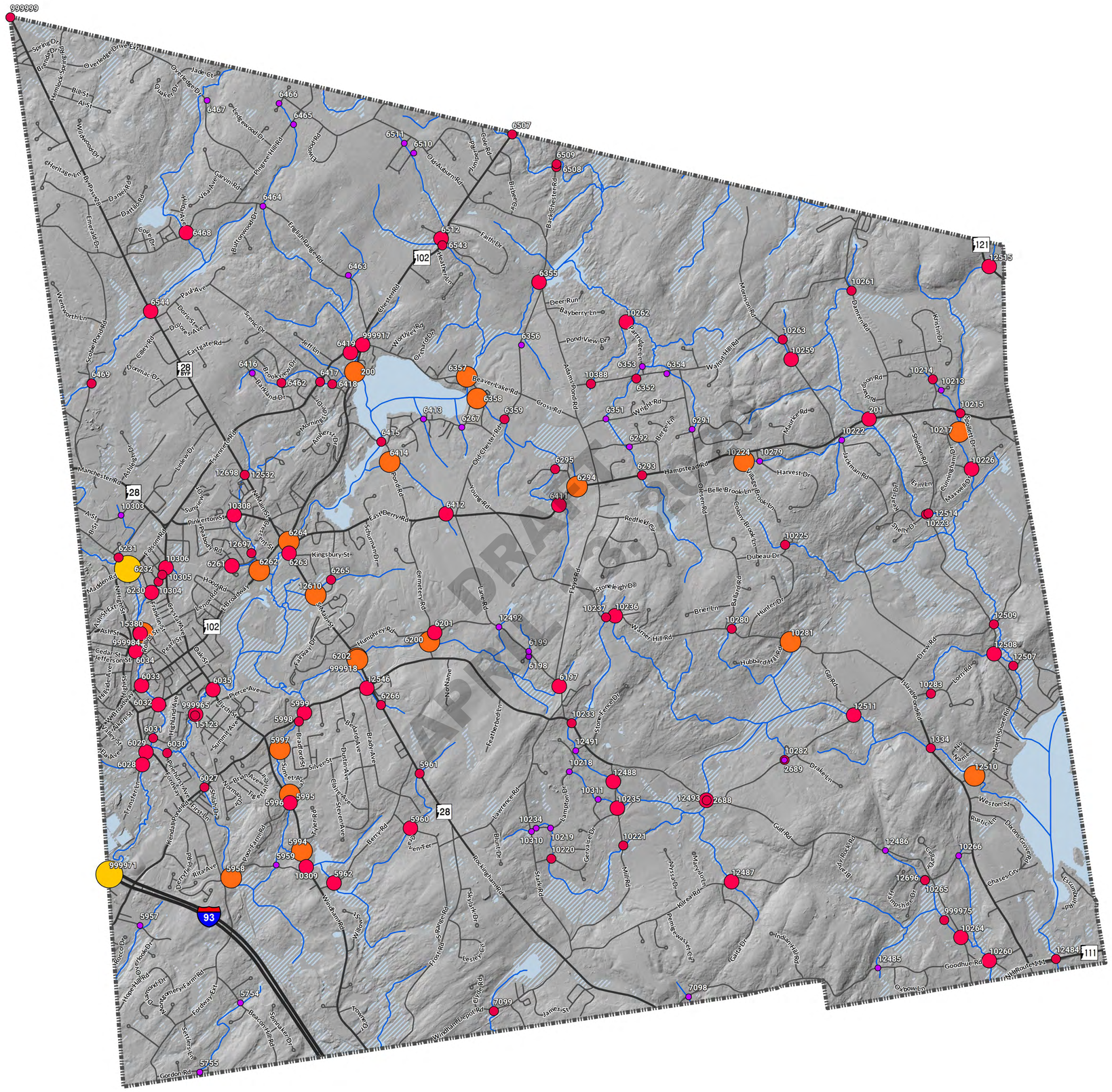
Stream Crossings: Derry

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Derry; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

Identified by asset

SNHPC

0 0.25 0.5 1 1.5 2 Miles



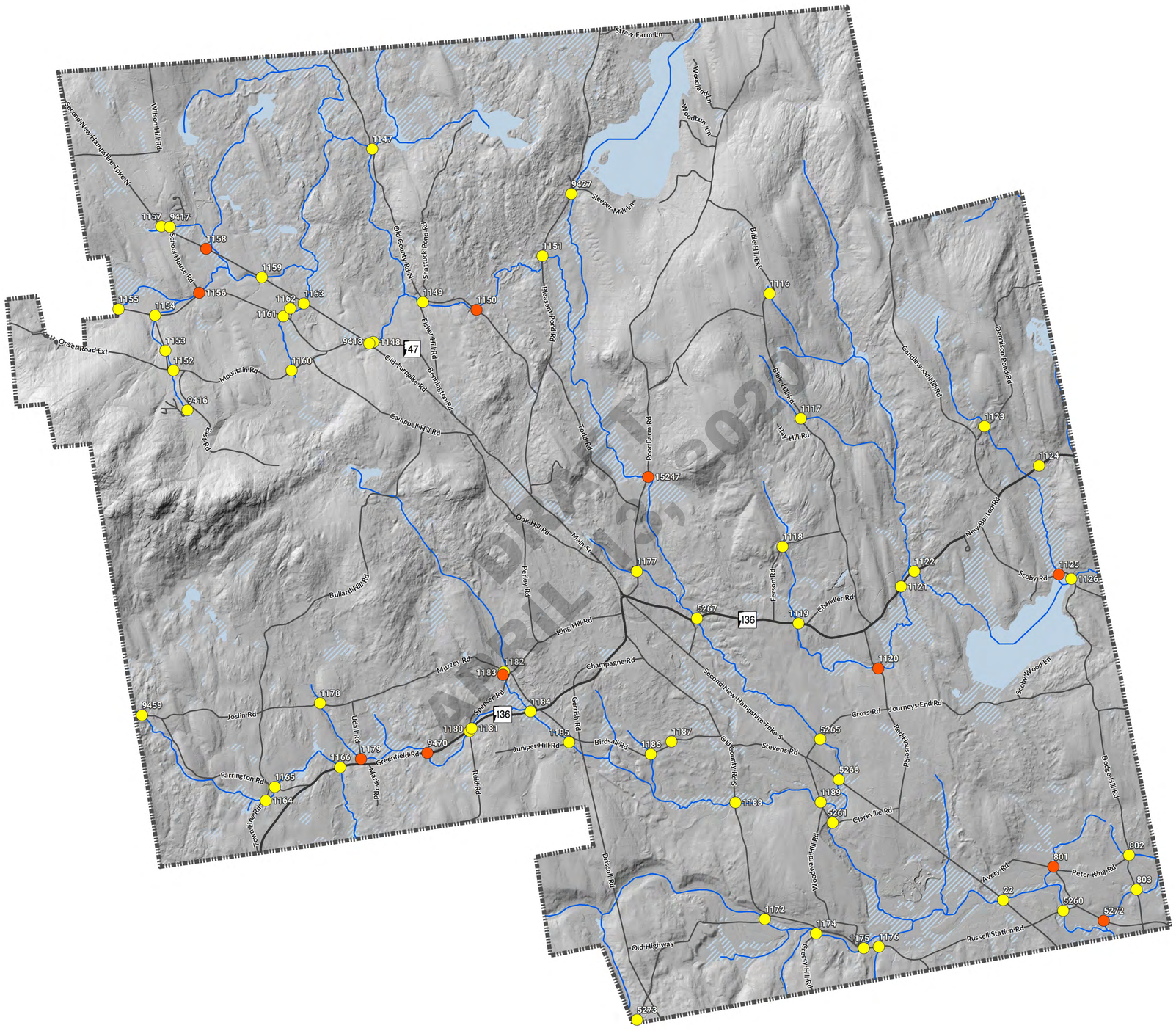
Scored Stream Crossings: Derry

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Derry; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

- 0 - 5
- 6 - 12
- 13 - 17
- 18 - 25
- 26 - 37

SNHPC

0 0.25 0.5 1 1.5 2 Miles



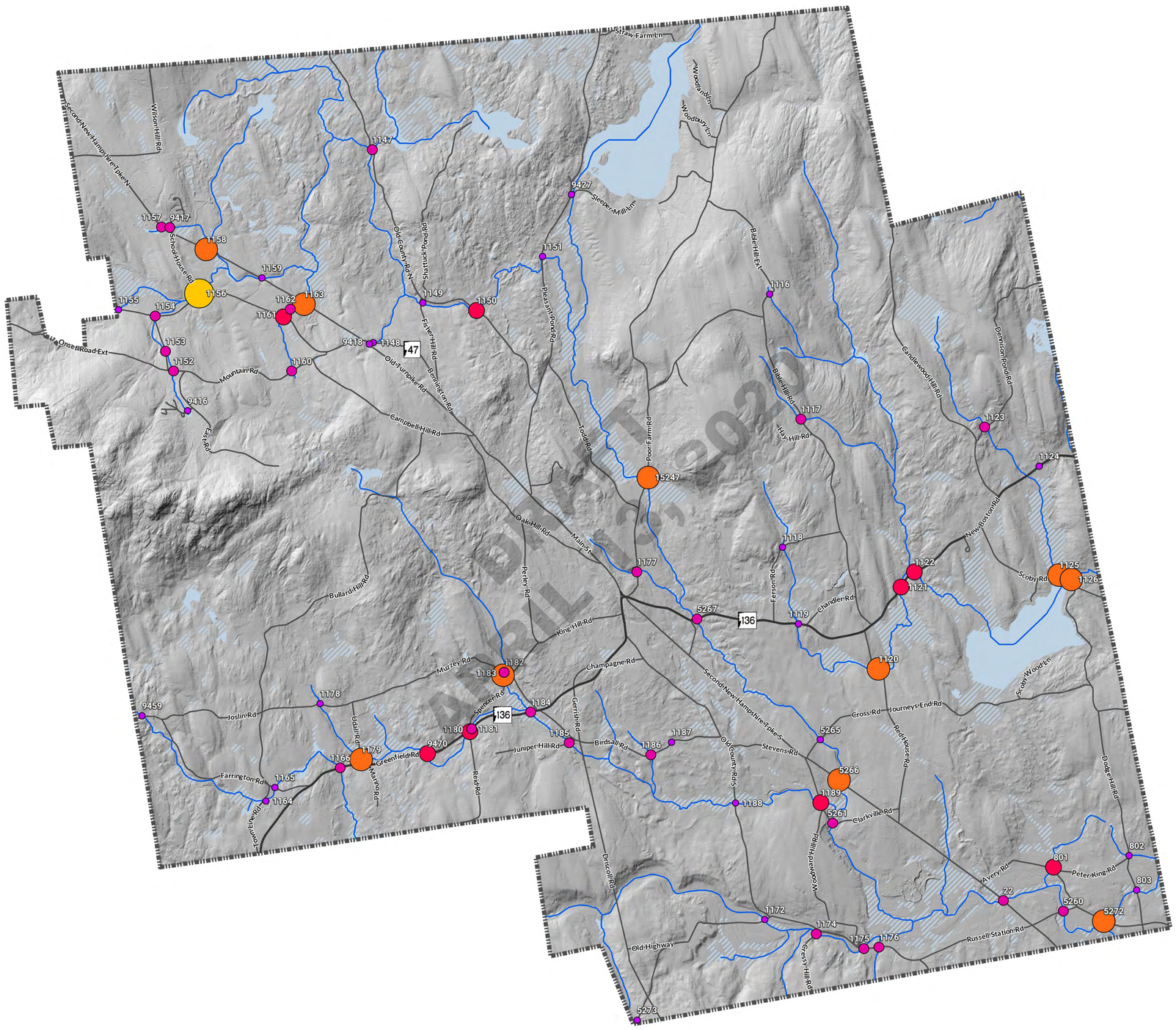
Stream Crossings: Francestown

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Francestown; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

Identified by asset managers

SNHPC

0 0.25 0.5 1 1.5 2 Miles



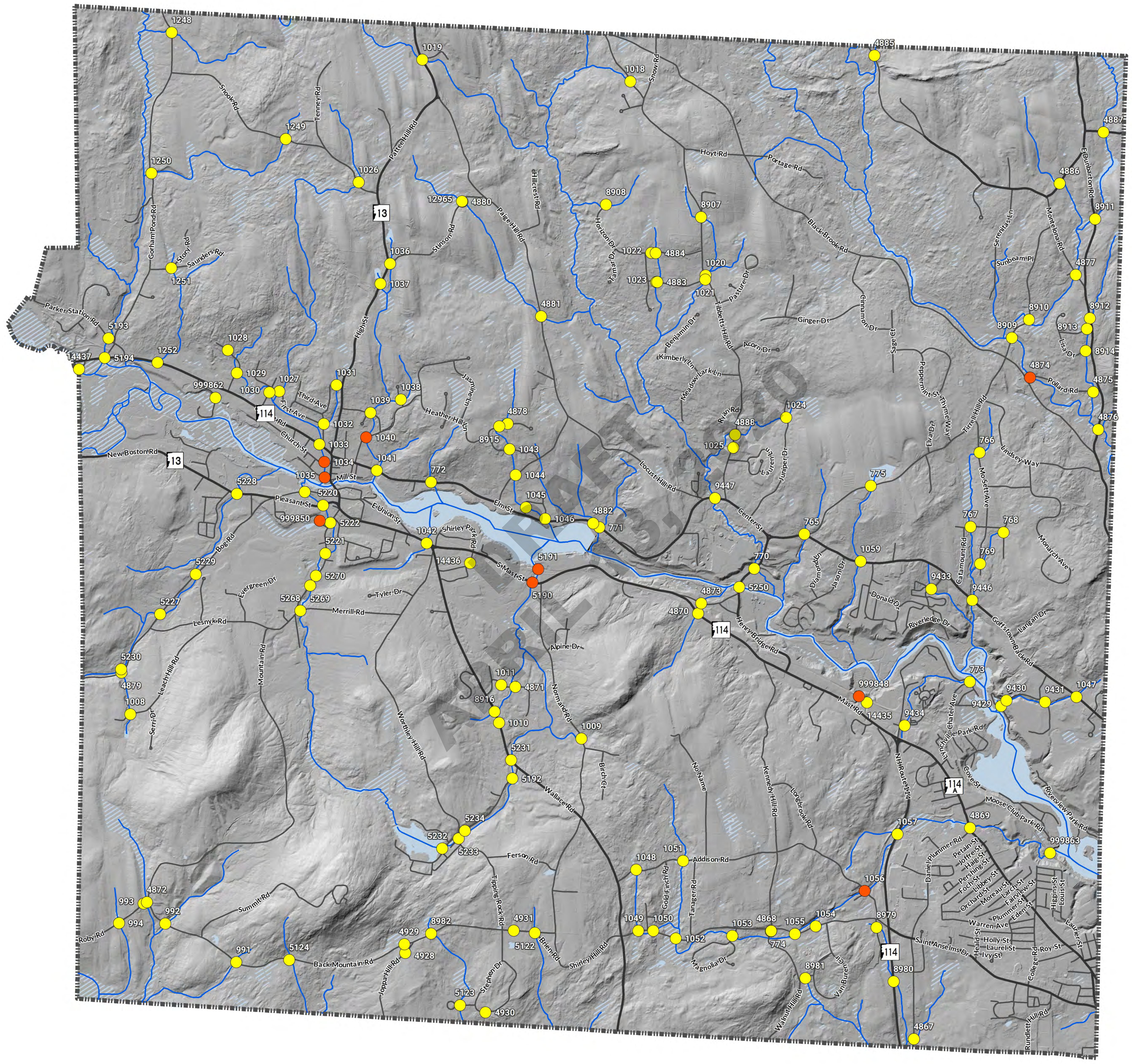
Scored Stream Crossings: Francestown

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Francestown; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

0 - 5
6 - 10
11 - 15
16 - 21
22 - 28

SNHPC

0 0.25 0.5 1 1.5 2 Miles



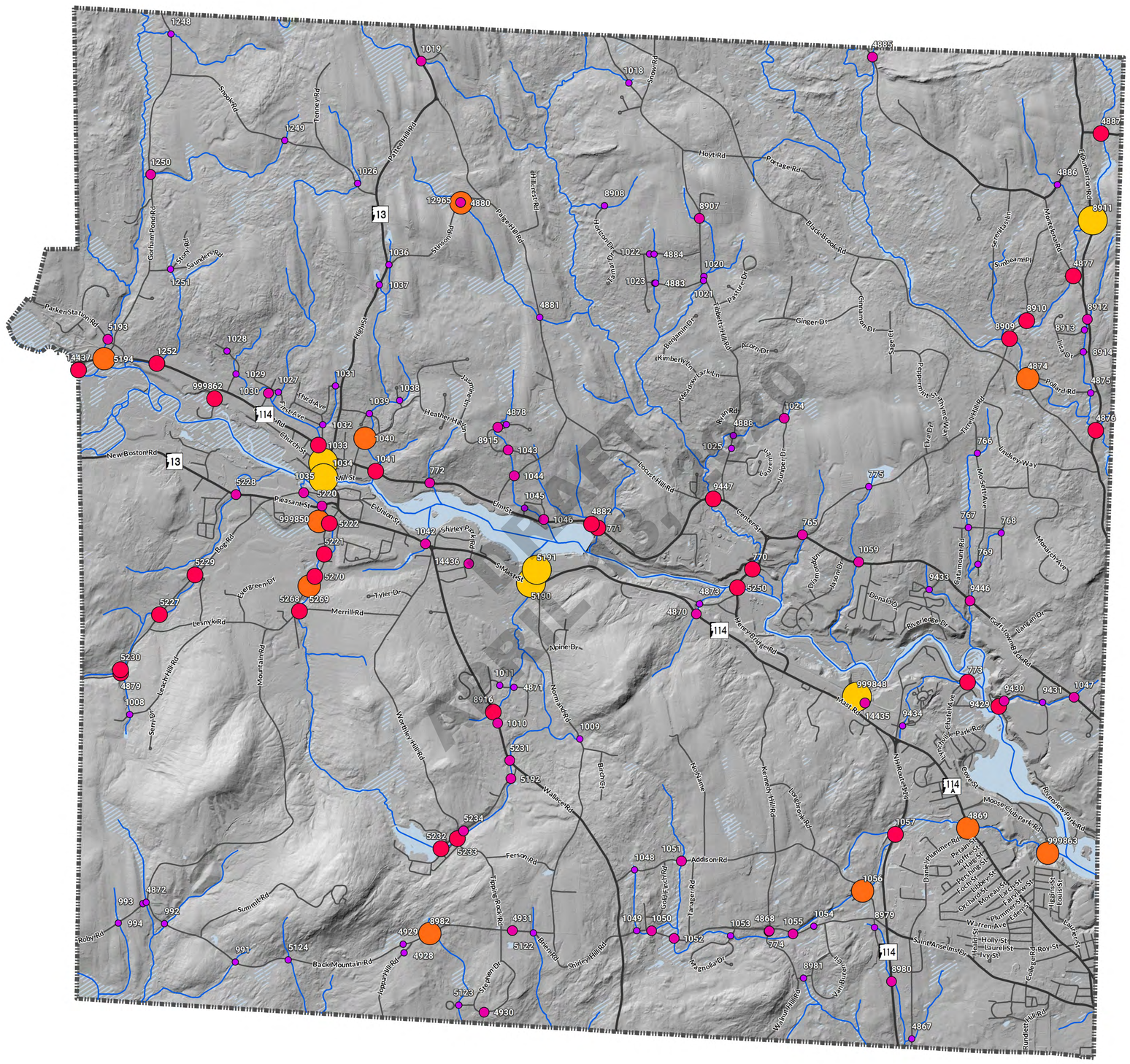
Stream Crossings: Goffstown

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Goffstown; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

Identified by asset managers

SNHPC

0 0.25 0.5 1 1.5 2 Miles



Scored Stream Crossings: Goffstown

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Goffstown; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- 21 - 28

SNHPC

0 0.25 0.5 1 1.5 2 Miles

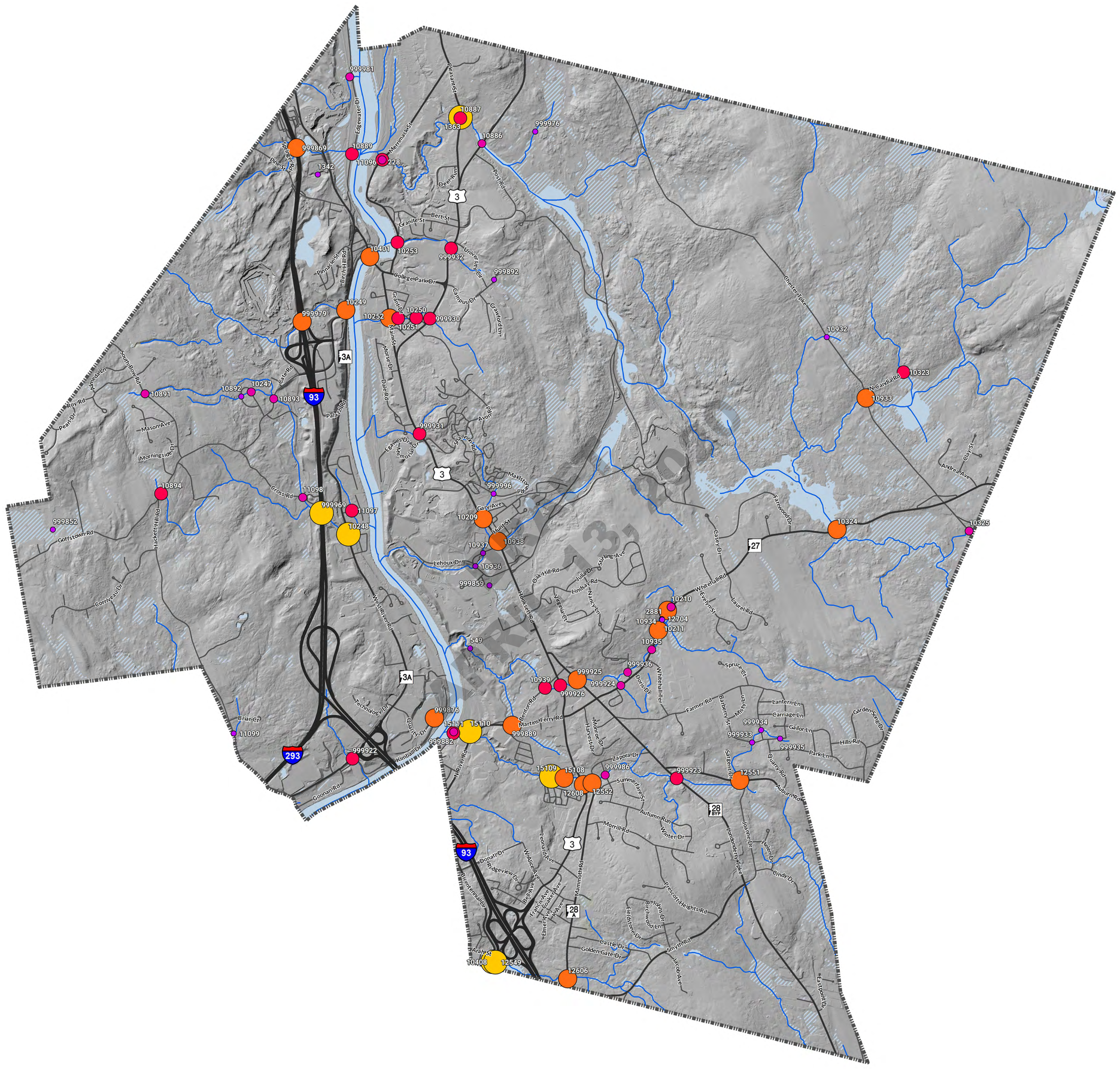
Stream Crossings: Hooksett

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Hooksett; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

Identified by asset managers

SNHPC

0 0.25 0.5 1 1.5 2 Miles



Scored Stream Crossings: Hooksett

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Hooksett; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

- 0 - 9
- 10 - 12
- 13 - 16
- 17 - 22
- 23 - 28

SNHPC

0 0.25 0.5 1 1.5 2 Miles

Stream Crossings: Londonderry

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Londonderry; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

Identified by asset managers

SNHPC

0 0.25 0.5 1 1.5 2 Miles

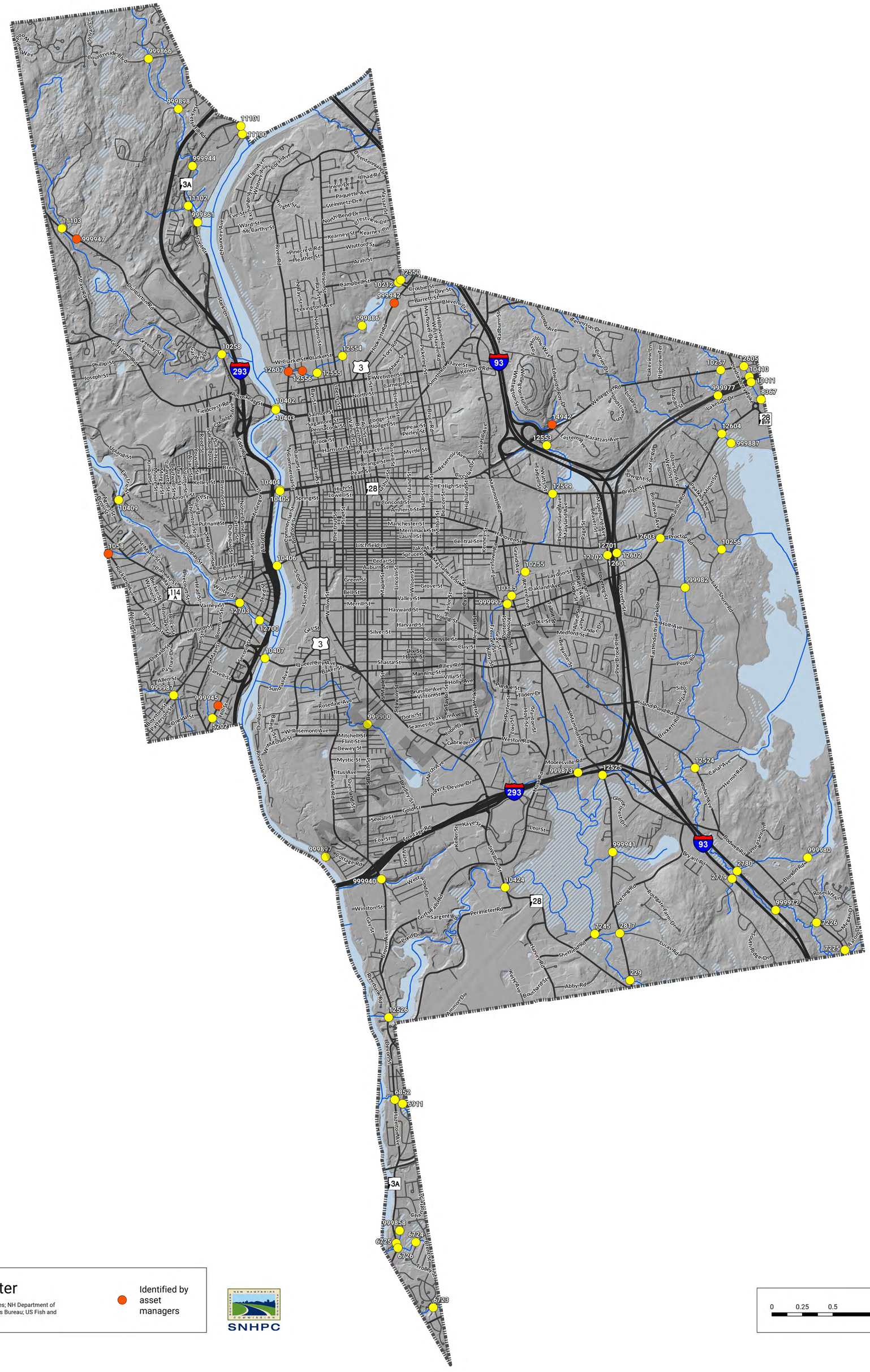
Scored Stream Crossings: Londonderry

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Londonderry; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 21
- 22 - 33

SNHPC

0 0.25 0.5 1 1.5 2 Miles



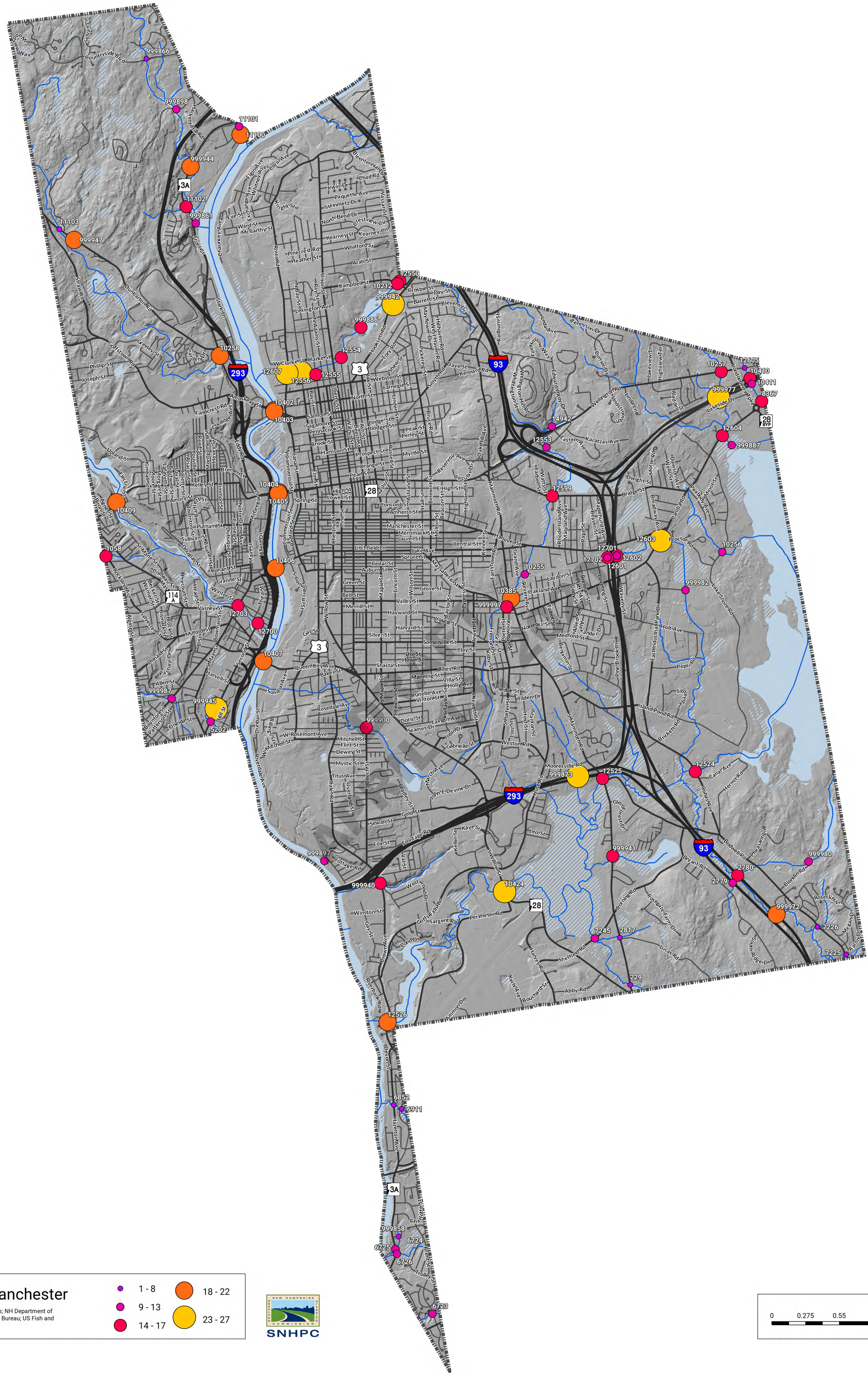
Stream Crossings: Manchester

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; City of Manchester; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

Identified by asset managers

SNHPC

0 0.25 0.5 1 1.5 2 Miles



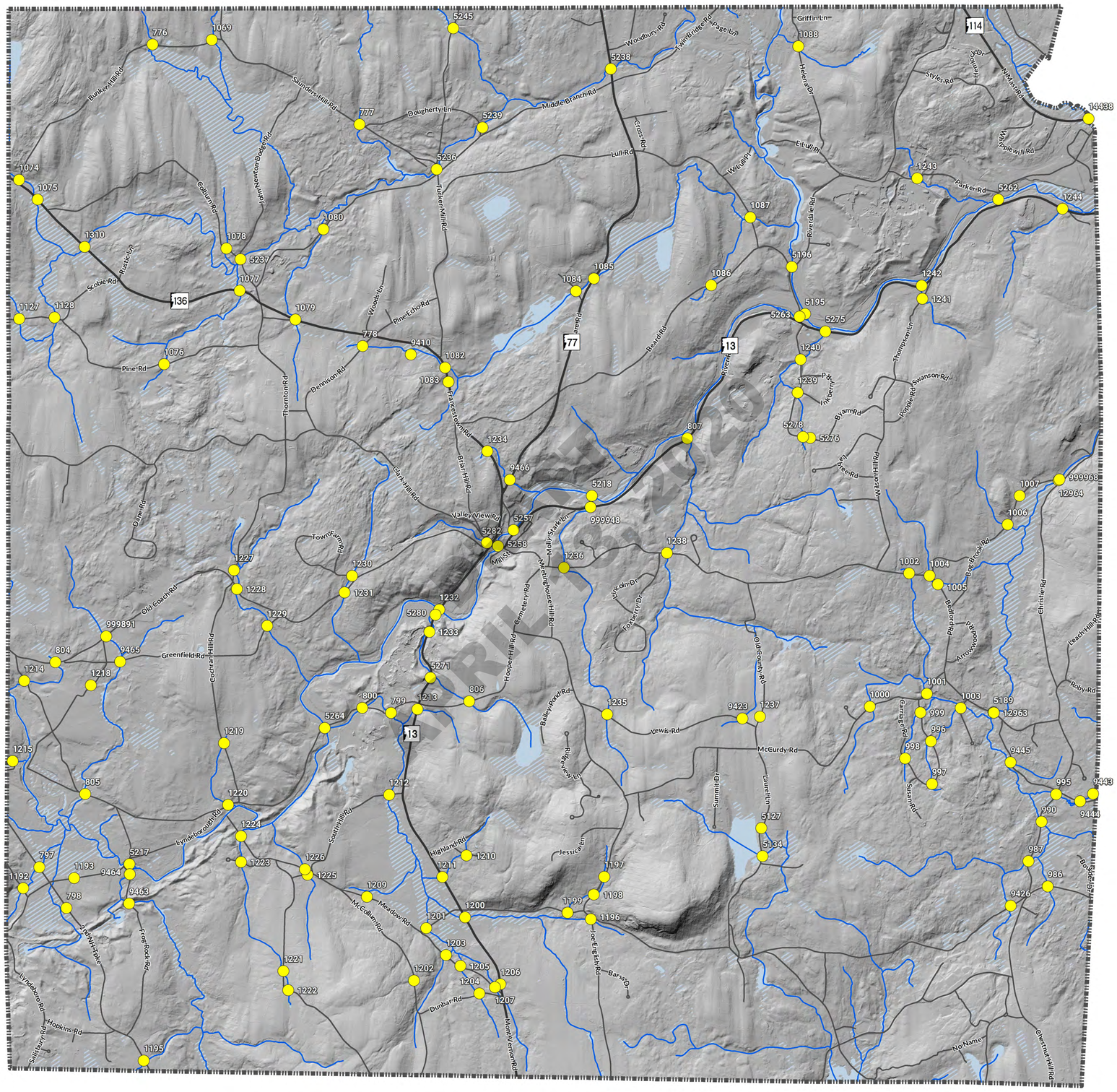
Scored Stream Crossings: Manchester

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; City of Manchester; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

- 1 - 8
- 9 - 13
- 14 - 17
- 18 - 22
- 23 - 27

SNHPC

0 0.275 0.55 1.1 1.65 2.2 Miles



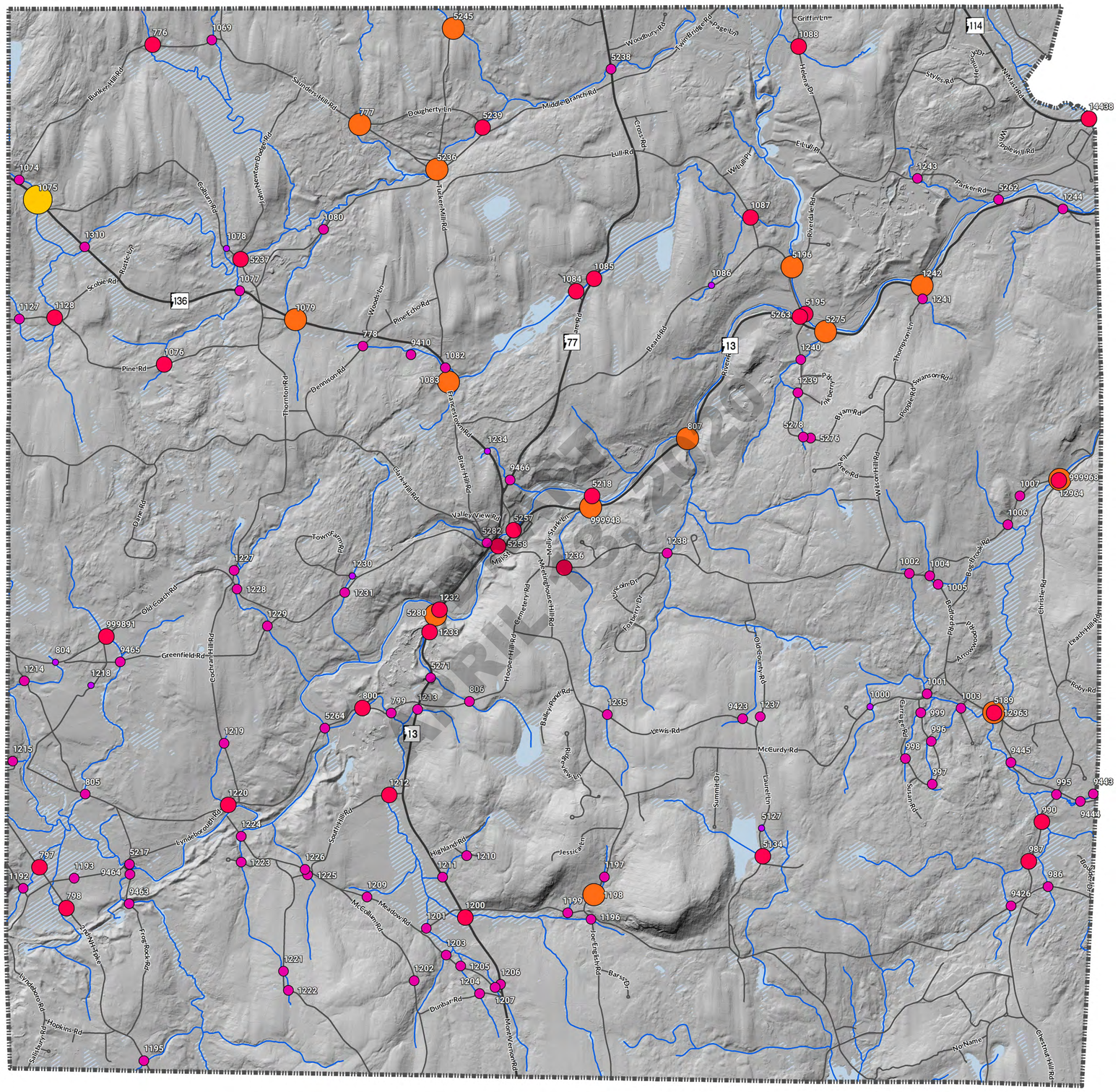
Stream Crossings: New Boston

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of New Boston; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

Identified by asset managers

SNHPC

0 0.25 0.5 1 1.5 2 Miles



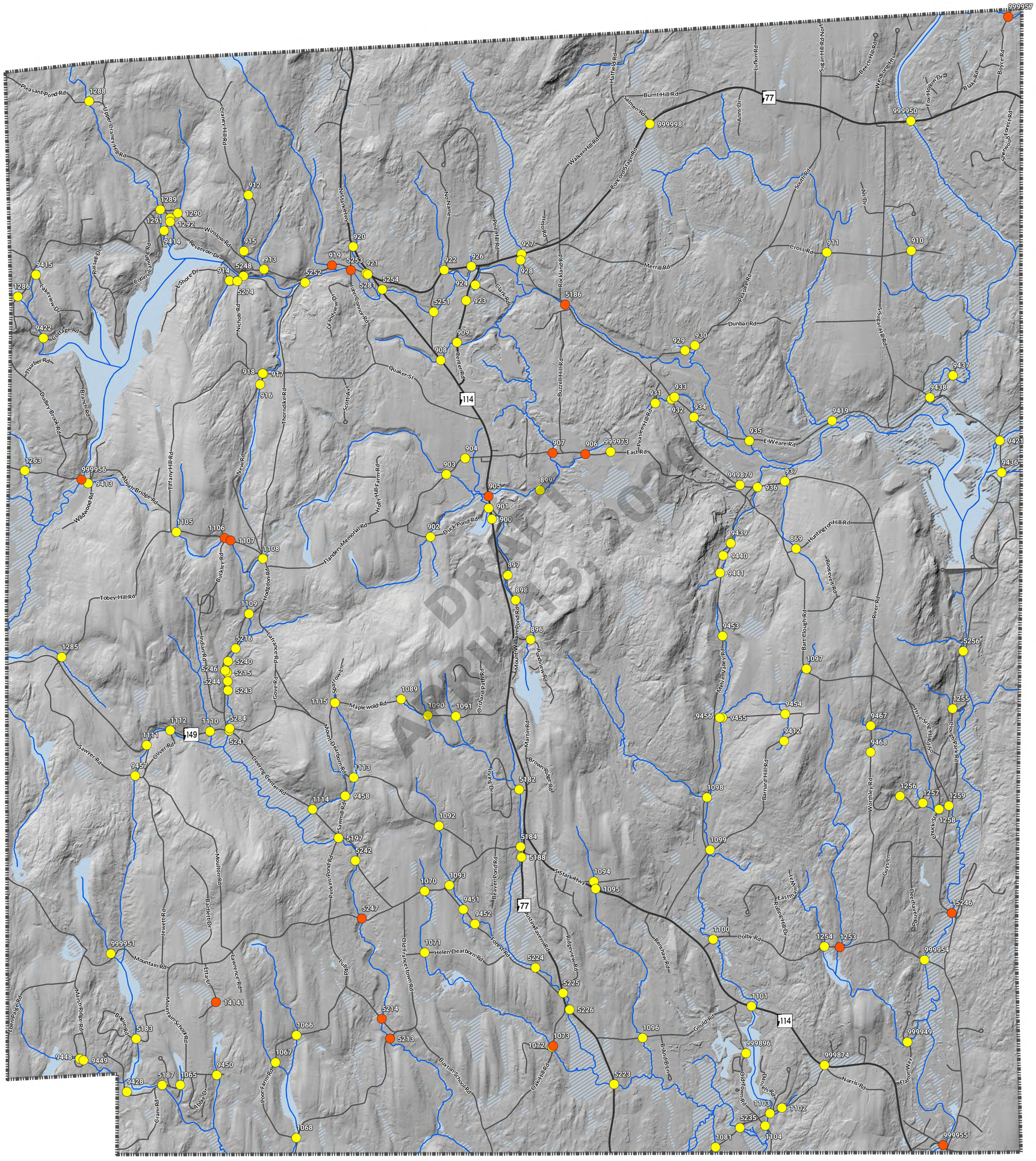
Scored Stream Crossings: New Boston

0 - 2
3 - 7
8 - 12
13 - 19
20 - 24

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of New Boston; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

SNHPC

0 0.25 0.5 1 1.5 2 Miles



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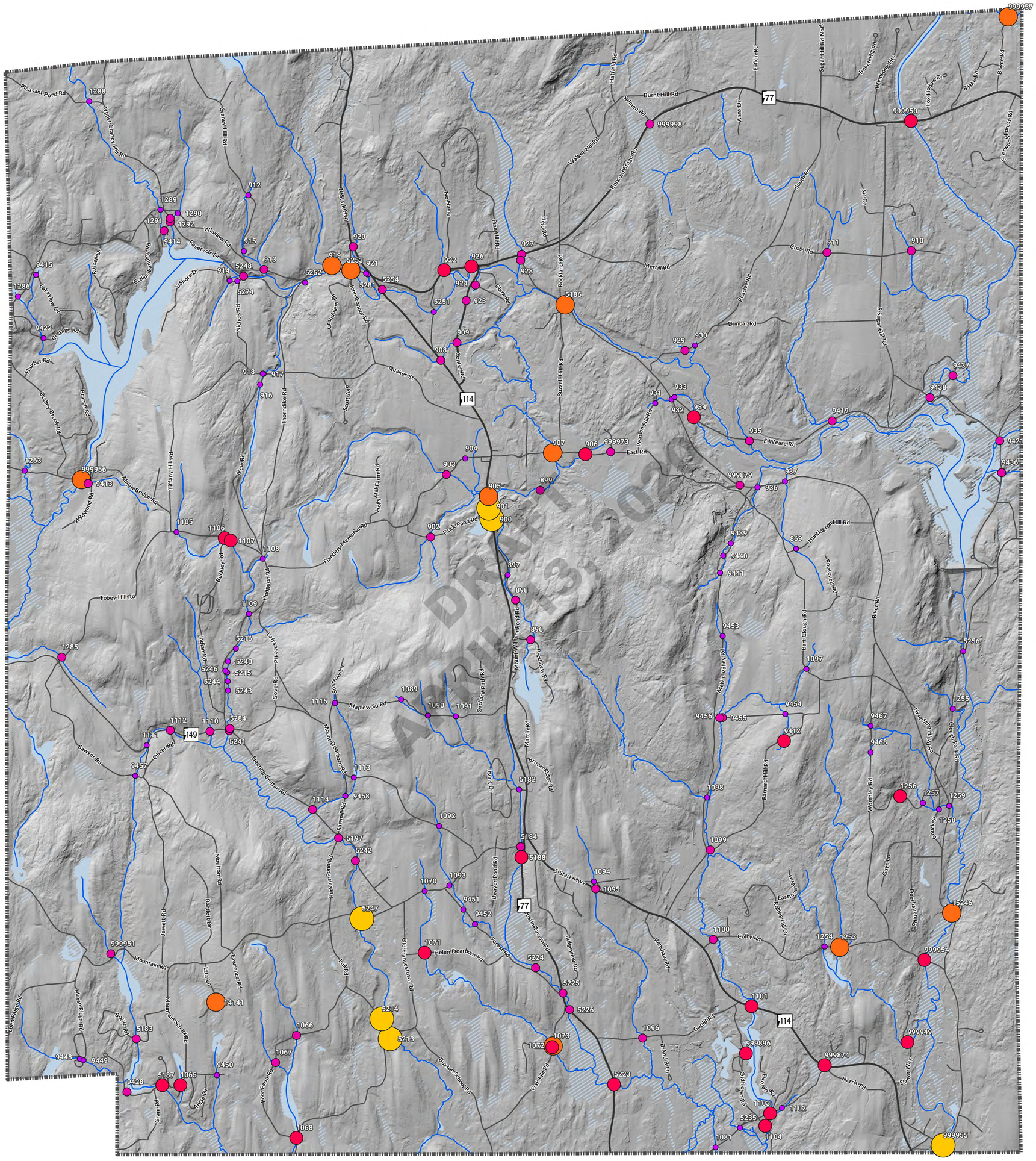
Stream Crossings: Weare

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Weare; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

● Identified by asset managers

SNHPC

0 0.25 0.5 1 1.5 2 Miles



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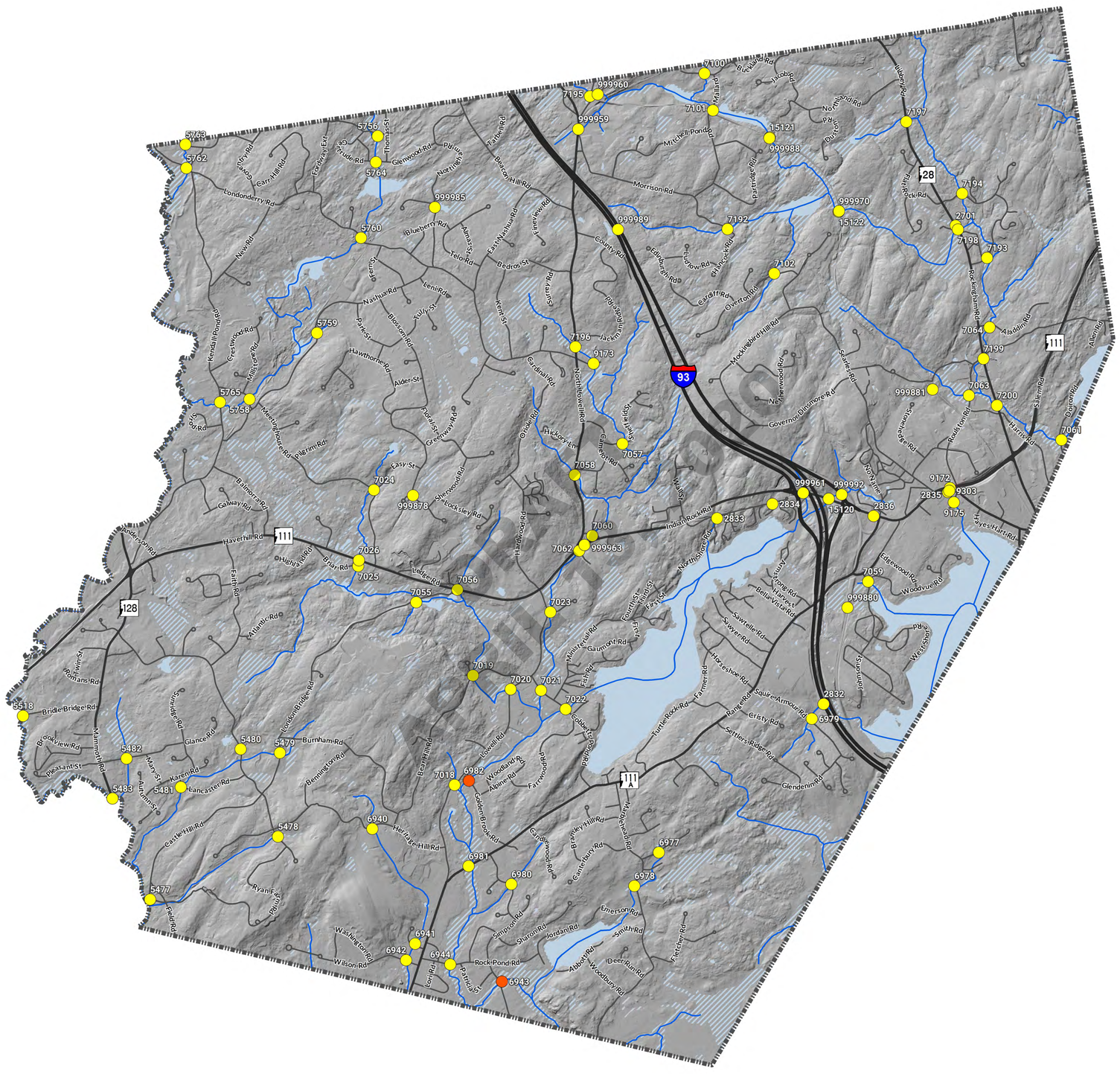
Scored Stream Crossings: Weare

Created by SNHPC, 2020 Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Weare; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

- 0 - 5
- 6 - 10
- 11 - 16
- 17 - 23
- 24 - 28

SNHPC

0 0.25 0.5 1 1.5 2 Miles



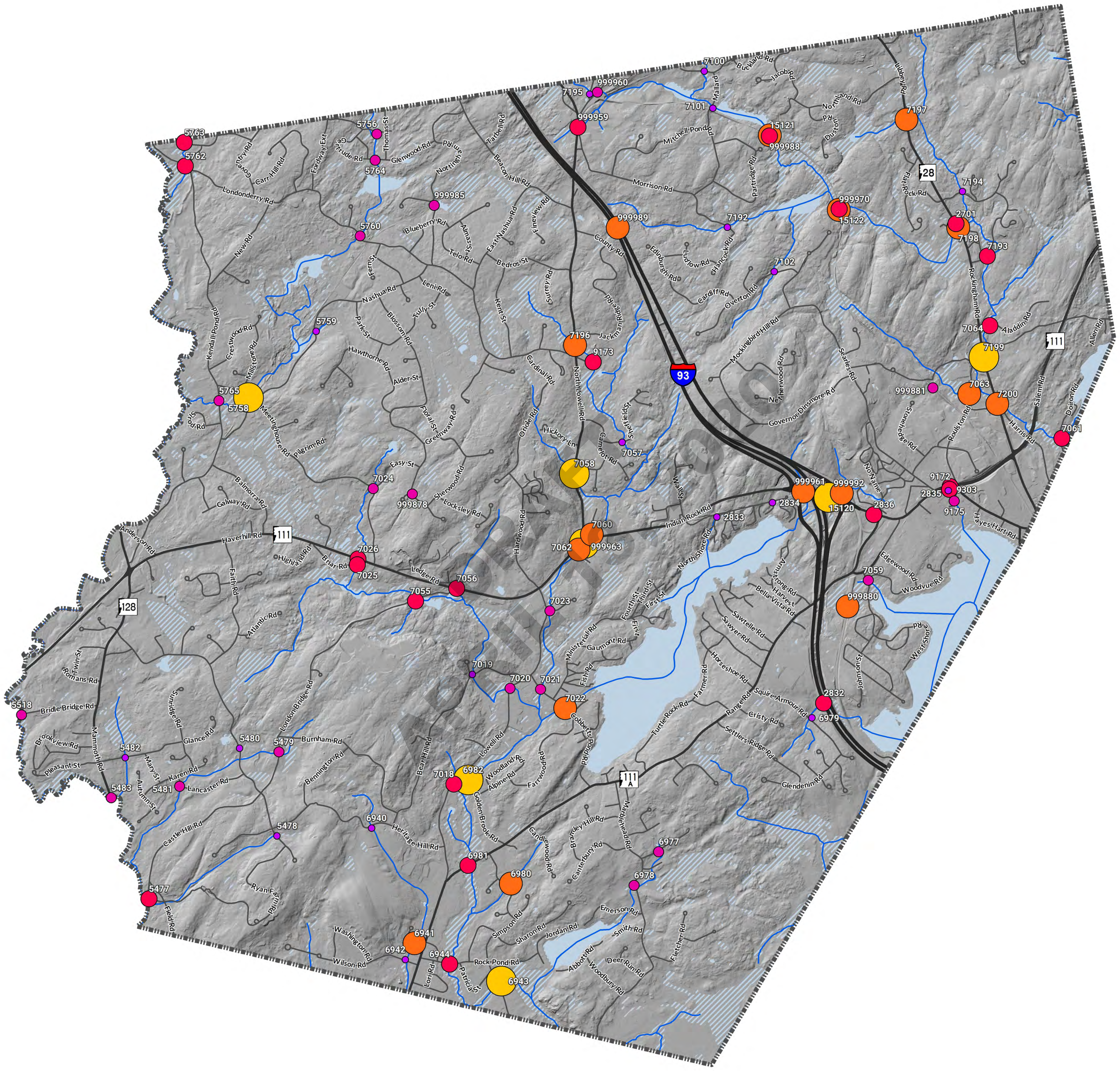
Stream Crossings: Windham

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Windham; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

Identified by asset managers

SNHPC

0 0.25 0.5 1 1.5 2 Miles



Scored Stream Crossings: Windham

Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; Town of Windham; University of New Hampshire; US Census Bureau; US Fish and Wildlife Service; US Geological Survey.

0 - 4	13 - 18
5 - 8	19 - 25
9 - 12	

SNHPC

0 0.25 0.5 1 1.5 2 Miles

APPENDIX C: OUTREACH MATERIALS

Presentation materials and meeting notes generated over the course of the vulnerability assessment project are included in this appendix file as follows:

LIST OF MATERIALS

1. Project Information Flyer
2. Executive Committee Presentation
3. Technical Advisory Committee Presentation #1
4. Technical Advisory Committee Presentation #2
5. Prioritization Model Findings Review Meeting Notes by Municipality

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2018 Stream Crossing Vulnerability Assessment

A DECISION-MAKING TOOL TO ASSIST MUNICIPALITIES WITH PRIORITIZING ADAPTATION TO A CHANGING CLIMATE



SNHPC seeks input from municipalities to identify criteria for prioritizing stream crossings. The assessment will be a resource to determine how to adapt to or mitigate risk associated with future changes in frequency and intensity of extreme weather events.

Vulnerability Assessment Project Manager James Vayo seeks a representative from your community to work with in development of criteria and priorities for your community. Please contact James at: jvayo@snhpc.org or by phone (603) 669-4664 x307 to set up a time to discuss the scope of work and determine next steps in developing a vulnerability report for your municipality.

Possible Selection Criteria:

- Ownership
- Size of Stream
- Volume of Traffic
- Detour Length
- Cost of Replacement
- Age of Infrastructure
- Access to Vital Services
- Past Occurrence of Flooding
- Detour Route Designation

Adaptation/Mitigation Options:

- Retrofit Exiting Crossings
- Updating Design Criteria
- Relocation of Crossings
- Revised Maintenance Plans
- Increase in Redundancy

VULNERABILITY ASSESSMENT FRAMEWORK

BUILDING RESILIENCE TO CLIMATE CHANGE

1. DEFINE SCOPE
& Articulate Objectives

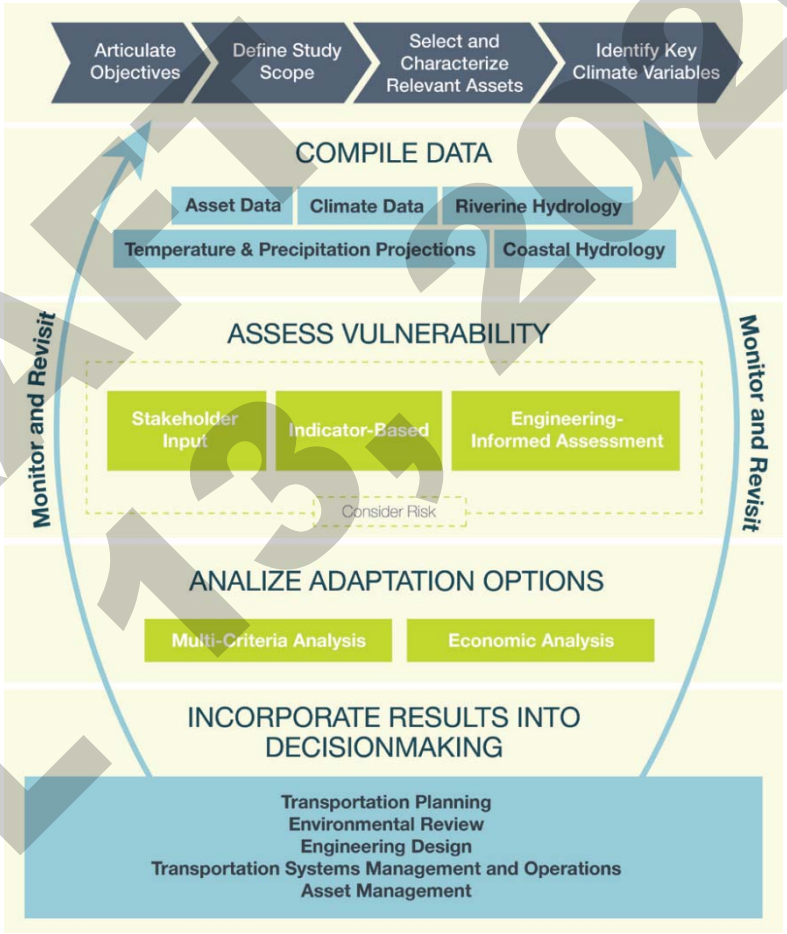
2. BUILD A TEAM
& Gather Local Input

3. SELECT ASSETS
& Verify Local Conditions

4. OBTAIN DATA
& Prioritize Assets by Risk Factors

5. ASSESSMENT
of Vulnerability to Climate Change

6. ID OPTIONS
& Offer Decision-making Tools



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STREAM CROSSINGS 6.0

NH STATEWIDE ASSET DATA EXCHANGE SYSTEM



ROBUST DATA SET

The SNHPC Region contains more than 1,300 points of data ranging from site photos to stream geometry

INTER-AGENCY ACCESS

Stream Crossing data is managed by SADES (T2) and provides SNHPC with access to GIS for data analysis

QUANTIFIABLE DATA

Existing compiled data provides a majority of information needed to conduct prioritization of crossings.

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Vulnerability Assessment

PROJECT FRAMEWORK PRESENTATION

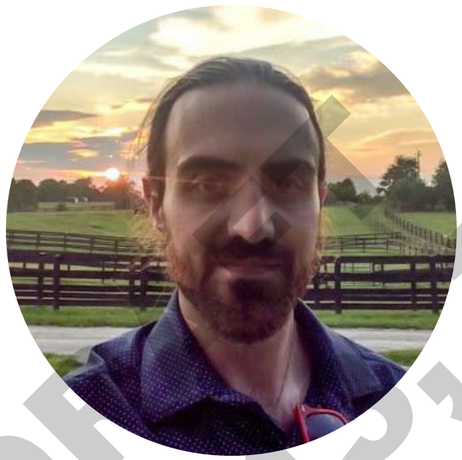
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SNHPC STAFF

VULNERABILITY ASSESSMENT PROJECT TEAM



JAMES VAYO
PROJECT MANAGER



ZACHARY SWICK
GIS SPECIALIST



MADDIE DIIONNO
FIELD SPECIALIST

SNHPC staff bring together experience and education in the fields of from community development, environmental planning, and transportation planning.

Their skills, along with the resources of the SNHPC office will serve the needs on this project through project management, data analysis, and data collection.

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VULNERABILITY ASSESSMENT FRAMEWORK

BUILDING RESILIENCE TO CLIMATE CHANGE

1. DEFINE SCOPE
& Articulate Objectives

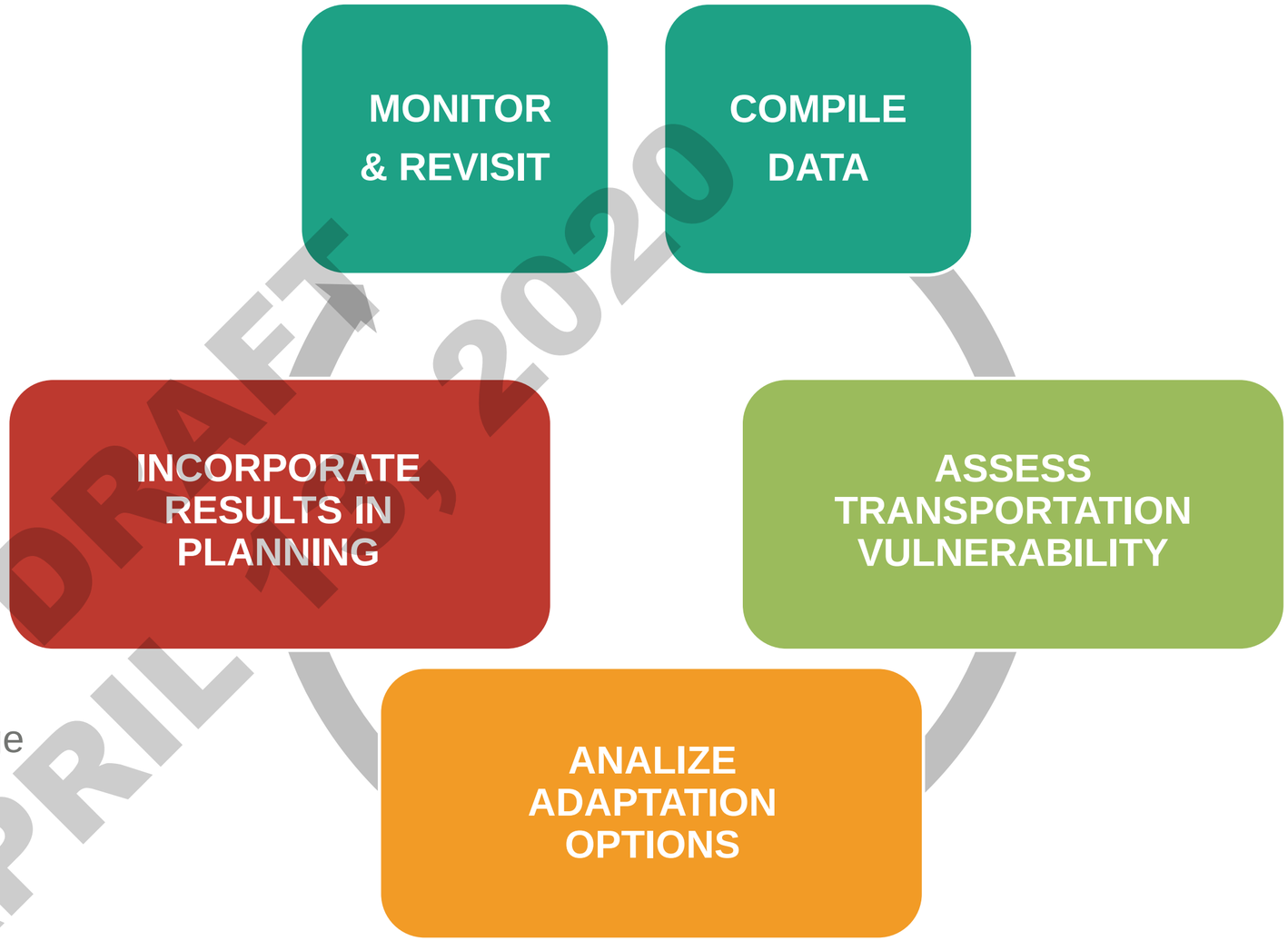
2. BUILD A TEAM
& Gather Local Input

3. SELECT ASSETS
& Verify Local Conditions

4. OBTAIN DATA
& Prioritize Assets by Risk

5. ASSESSMENT
of Vulnerability to Climate Change

6. IDENTIFY OPTIONS
& Offer Decision-making Tools



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1. DEFINE SCOPE

& Articulate Objectives



- **What type of decisions or actions should the assessment inform?**
- **What efforts has the region previously conducted related vulnerabilities?**
- **What relevant climate adaptation assessments have others done?**
- **What is motivating the need for the assessment?**
- **Who will use the information provided by the assessment?**
- **How much detail is needed to produce useful results?**

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2. BUILD A TEAM

& Gather Local Input

NH SADES

UNH T²

- **Transportation Planners** for planning long-term investments and policies.
- **Asset Managers** for knowledge of weather affect on transportation assets.
- **Emergency Responders** for operational needs during severe weather events.
- **GIS Specialists** to analyze and display asset vulnerability information.
- **State Environmental Staff** for access to datasets and area research.
- **University Scientists** for geographically-focused climate projections.

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3. SELECT ASSETS

& Verify Local Conditions

Factors (asset quantity)	Characteristics (asset quality)
Jurisdiction / Ownership	Age of Asset
Geography	Design Life / Stage
Model / Example Set	Location
Repeated Impact	Elevation
Stage of Life	Performance / Capacity
Most Critical	Level of Use
Existing Asset	Replacement Cost
Future Asset	Occurrence of Maintenance
Previous Assessment	Asset Design

- Is usable data readily available for the transportation asset?
- If data is not available, then is an assessment of the selected asset viable?
- Does field data need to be collected in order to conduct an assessment?
- What agencies house the data; how will that information be shared?
- Conducting quantitative assessments can take significant effort to gather information and to convert all gathered data into a usable format for analysis.

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STREAM CROSSINGS 6.0

NH STATEWIDE ASSET DATA EXCHANGE SYSTEM



ROBUST DATA

The SNHPC Region contains more than 1,300 points of data from site photos to stream geometry

AGENCY ACCESS

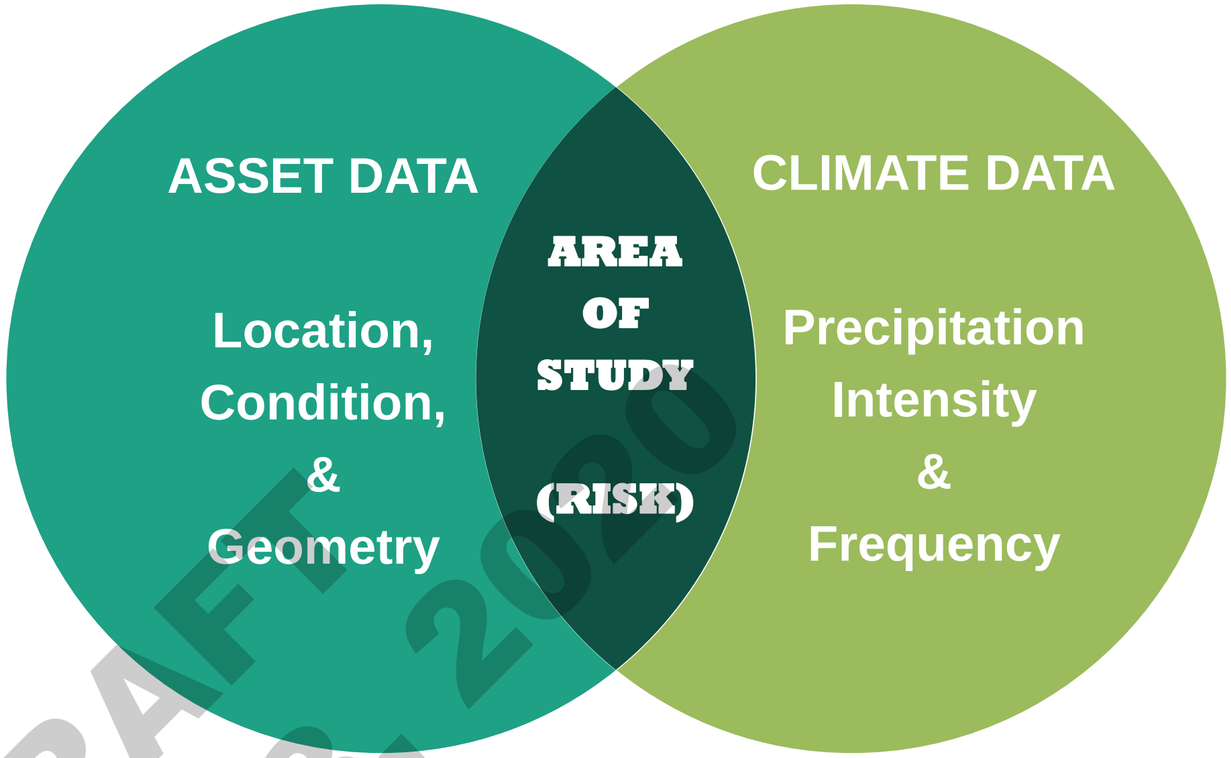
Stream Crossing data is managed by SADES (T2) providing SNHPC with access to allow GIS analysis

QUANTIFIABLE

Existing compiled data provides a majority of information needed to conduct prioritization crossings.

4. OBTAIN DATA

& Prioritize Assets by Risk Factors



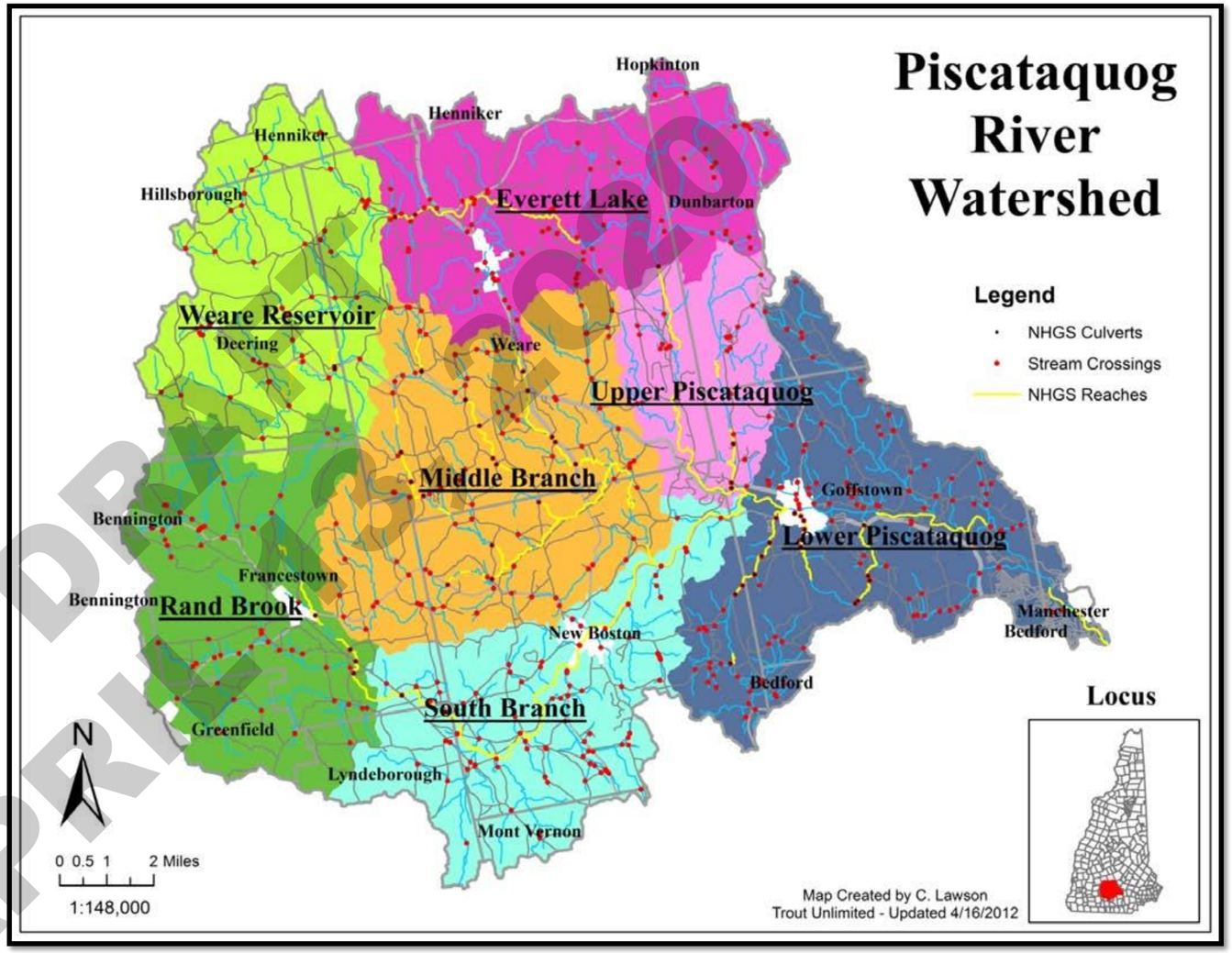
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- Data gathered from local level up to national datasets.
- Local road agents and DPW engineers provide local information.
- NH DES staff provide data on hydrology and previous analysis.
- UNH climate research staff provide information on climate data.
- Regional data archives: LiDAR, NH DOT Roadway Classifications.
- Federal agency supported data: FEMA Flood Maps and HUC data.

5. ASSESSMENT

of Vulnerability to Climate Change

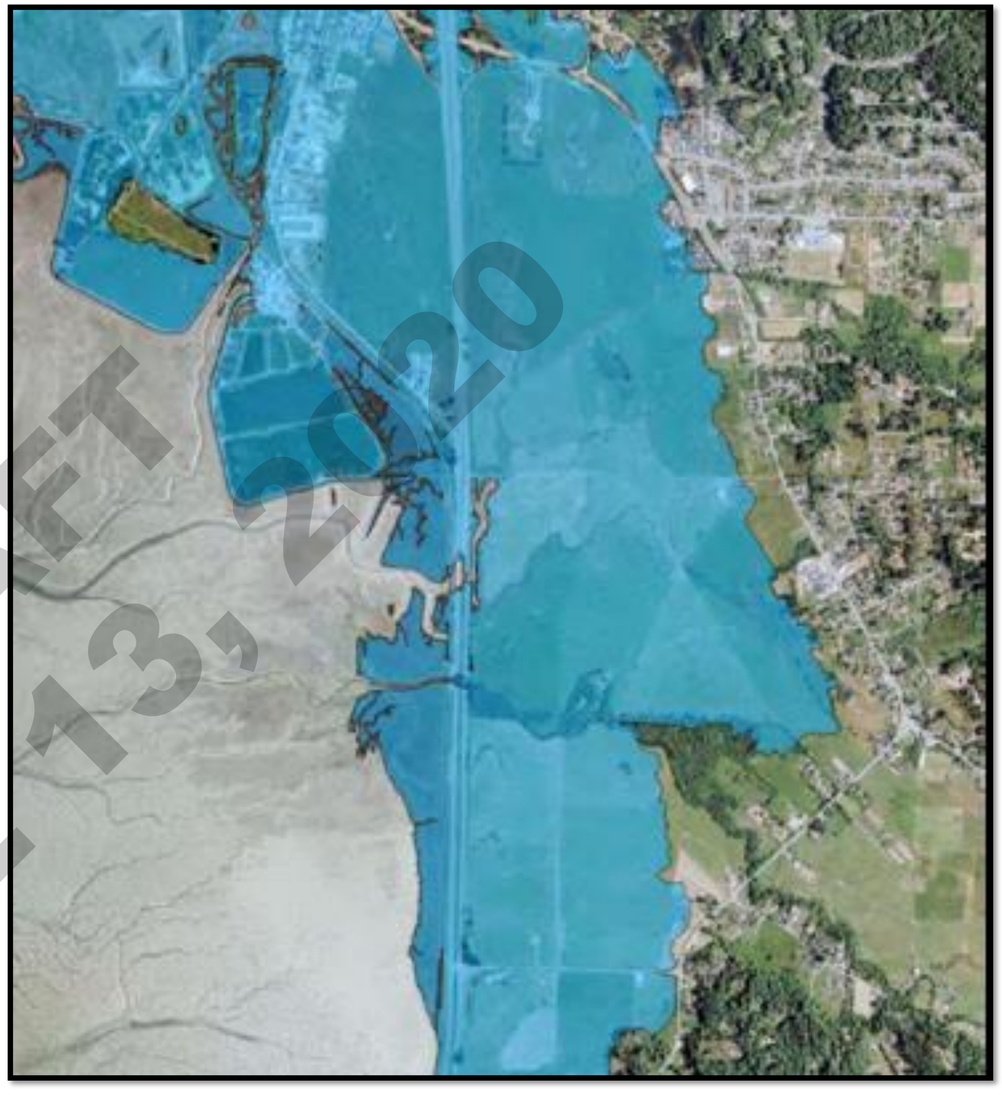
- This assessment if different from past efforts.
- Piscataquog River assessment was focused on hydraulic capacity.
- NHGS/DES conducting analysis to provide similar information throughout NH.
- SNHPC effort focused on measuring impact of upstream ponding.
- NHGS/DES providing data delineating ponding areas.



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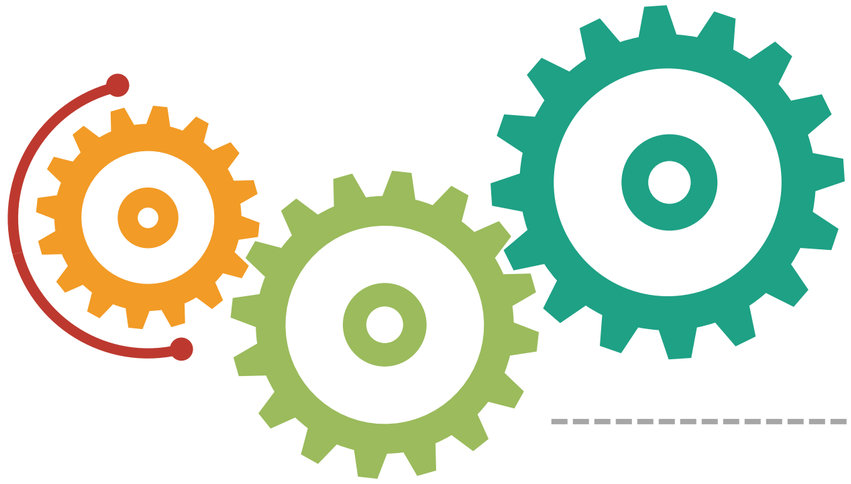
5. ASSESSMENT
of Vulnerability to Climate Change

- Use data gathered to screen and score stream crossings for risk.
- Review scoring with local asset and emergency managers to select specific location for impact assessment.
- Conduct “Ponding” assessment to determine impact to property.
- Determine future climate scenarios to estimate frequency of impact.
- Share findings in community specific reports to municipalities.



Illustrative Graphic of Flooding Delineation

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Adaptation & Mitigation

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- **Design new assets to withstand conditions anticipated in the future.**
- **Retrofit existing assets to accommodate impacts.**
- **Increase redundancy of the system to ensure transportation services provided by infrastructure can maintain operations.**
- **Relocate assets to avoid damage.**
- **Incorporate findings into asset management plans and systems.**
- **Recommend economic analysis to determine best options.**
- **Recommend options for incorporation of results into O&M schedules.**

VULNERABILITY ASSESSMENT MILESTONES

VULNERABILITY ASSESSMENT TIMELINE

2016 - PISCATAQUOG RIVER WATERSHED PRORITIZATION MODEL

Milone & MacBroom and others pilot a decision-making screening tool to aid communities in selection of priority stream crossing locations for replacement.

SEPTEMBER 2018 VULNERABILITY ASSESSMENT

SNHPC commences assessment work as part of their work program. SNHPC Staff conduct asset manager outreach, data gathering, and desk review.

DRAFT APRIL 13, 2020

NOVEMBER 2018 COORDINATION WITH NHGS / DES

—

SNHPC staff work with DES to identify potential project overlaps and opportunity for new types of stream crossing analysis.

JANUARY 2019 PRIORITIZATION & IMPACT ANALYSIS

—

SNHPC staff utilize NHGS/DES-developed ponding delineation to determine potential impact. Asset managers to select stream crossings for impact analysis.

DRAFT APRIL 13, 2020

MARCH 2019
COMMUNICATION OF ANALYSIS FINDINGS

Summarize findings for each municipality, present impact potential, and gather community input.

MAY 2019
FINAL REPORT

Identify options for decision-making, recommend strategies for adaptation and mitigation to climate change.

DRAFT
APRIL 13, 2020

VULNERABILITY ASSESSMENT GOALS

BUILDING RESILIENCE TO CLIMATE CHANGE

SOLICIT STAKEHOLDER FEEDBACK

MEASURE OUTCOMES & REVISIT ASSESSMENT

STRATEGY ALIGNMENT ACROSS AGENCIES

INTEGRATION OF REPORT INTO PLANNING PROCESS

DATA COLLECTION & INFORMATION SHARING

IDENTIFY TOOLS FOR ADAPTATION & MITIGATION

DRAFT
APRIL 15, 2020



QUESTIONS & COMMENTS

FEEL FREE TO CONTACT US ANYTIME

JAMES M. VAYO, AICP

PROJECT MANAGER

Mail
438 Dubuque Street
Manchester, NH 03102

Phone
Office: 603.669.4664

Email / Website
jvayo@snhpc.org
www.snhpc.org

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APRIL 13, 2020

REGION-WIDE VULNERABILITY ASSESSMENT

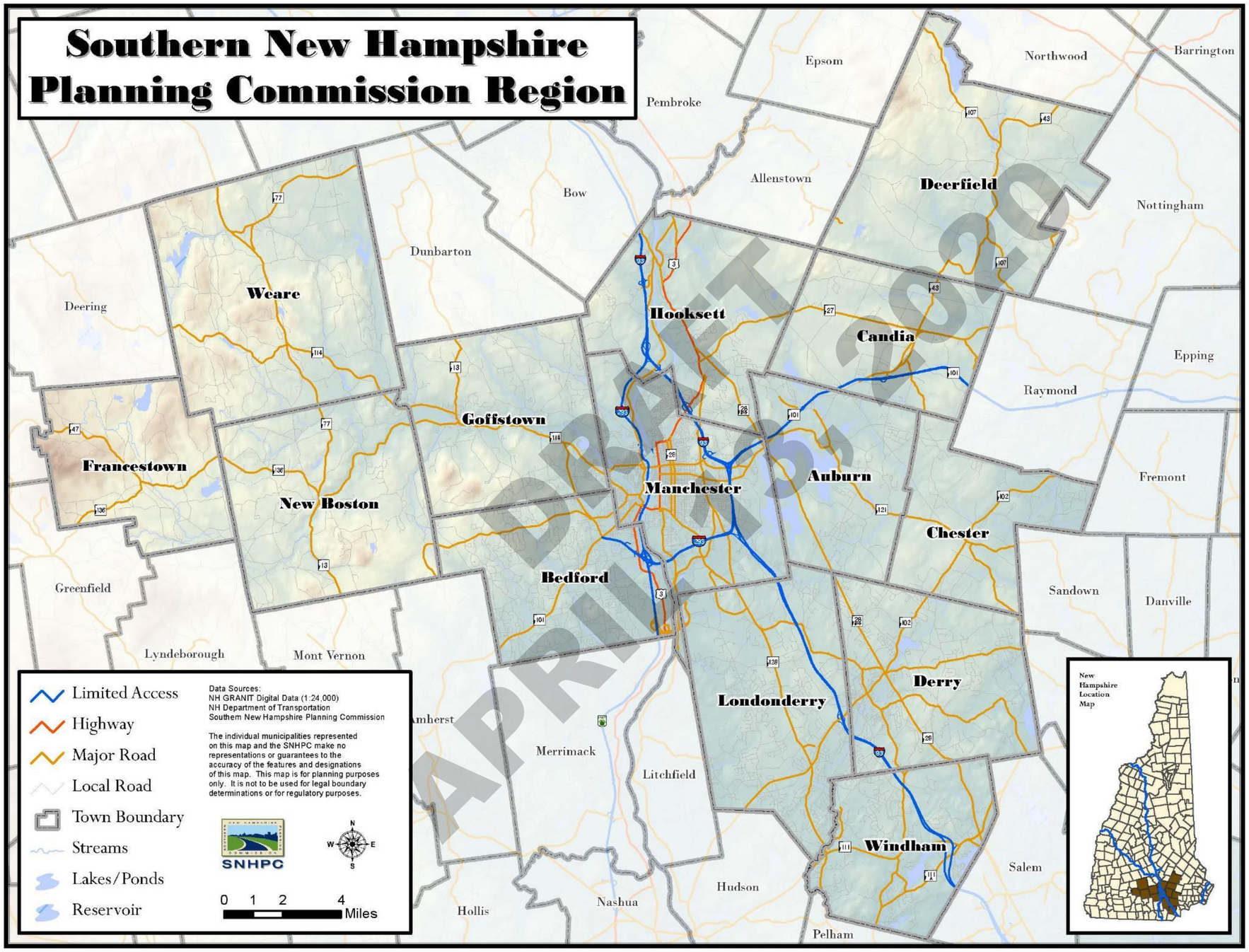
ANALYSIS FINDINGS SUMMARY



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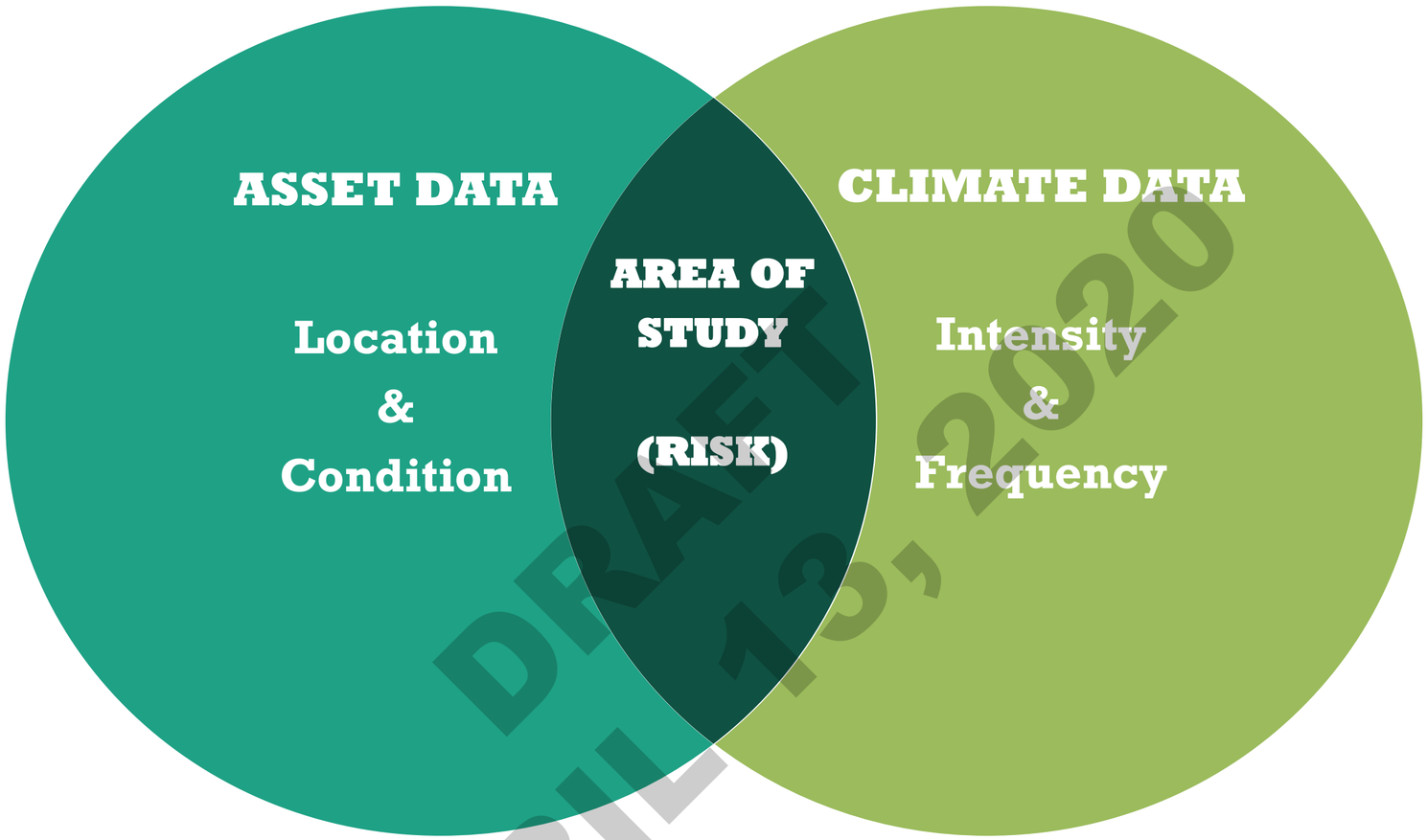
VULNERABILITY ASSESSMENT

DEFINED STUDY AREA



VULNERABILITY ASSESSMENT

ARTICULATE ASSESSMENT OBJECTIVES



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- Identify potential impacts
  - Increase agency coordination
    - Assist community decision-making
      - Recommend adaptation/mitigation strategies

VULNERABILITY ASSESSMENT

ARTICULATE ASSESSMENT OBJECTIVES



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VULNERABILITY ASSESSMENT

ARTICULATE ASSESSMENT OBJECTIVES



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VULNERABILITY ASSESSMENT

ARTICULATE ASSESSMENT OBJECTIVES



Prioritize stream crossings by risk factors.

Spectrum of Vulnerability



Low Likelihood
Low Impact

High Likelihood
High Impact

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VULNERABILITY ASSESSMENT

PRIORITIZED BY RISK FACTORS

Over 1,800 stream crossings in SNHPC region.

How to we look at risk to road network?

Prioritize stream crossings by risk factors.

Assess risk by available data:

- **Traffic Volume**
- **FEMA Flood Map**
- **Culvert Condition**
- **Structure Material (Is It Metal?)**

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STREAM CROSSINGS 6.0

NH STATEWIDE ASSET DATA EXCHANGE SYSTEM



ROBUST DATA

The SNHPC Region contains more than 1,500 points of data from site photos to stream geometry

AGENCY ACCESS

Stream Crossing data is managed by SADES (T2) providing SNHPC with access to allow GIS analysis

QUANTIFIABLE

Existing compiled data provides a solid base of information needed to conduct prioritization crossings.

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VULNERABILITY ASSESSMENT

PRIORITIZED BY RISK FACTORS

Over 1,800 stream crossings in SNHPC region.

How to we look at risk to road network?

Prioritize stream crossings by risk factors.

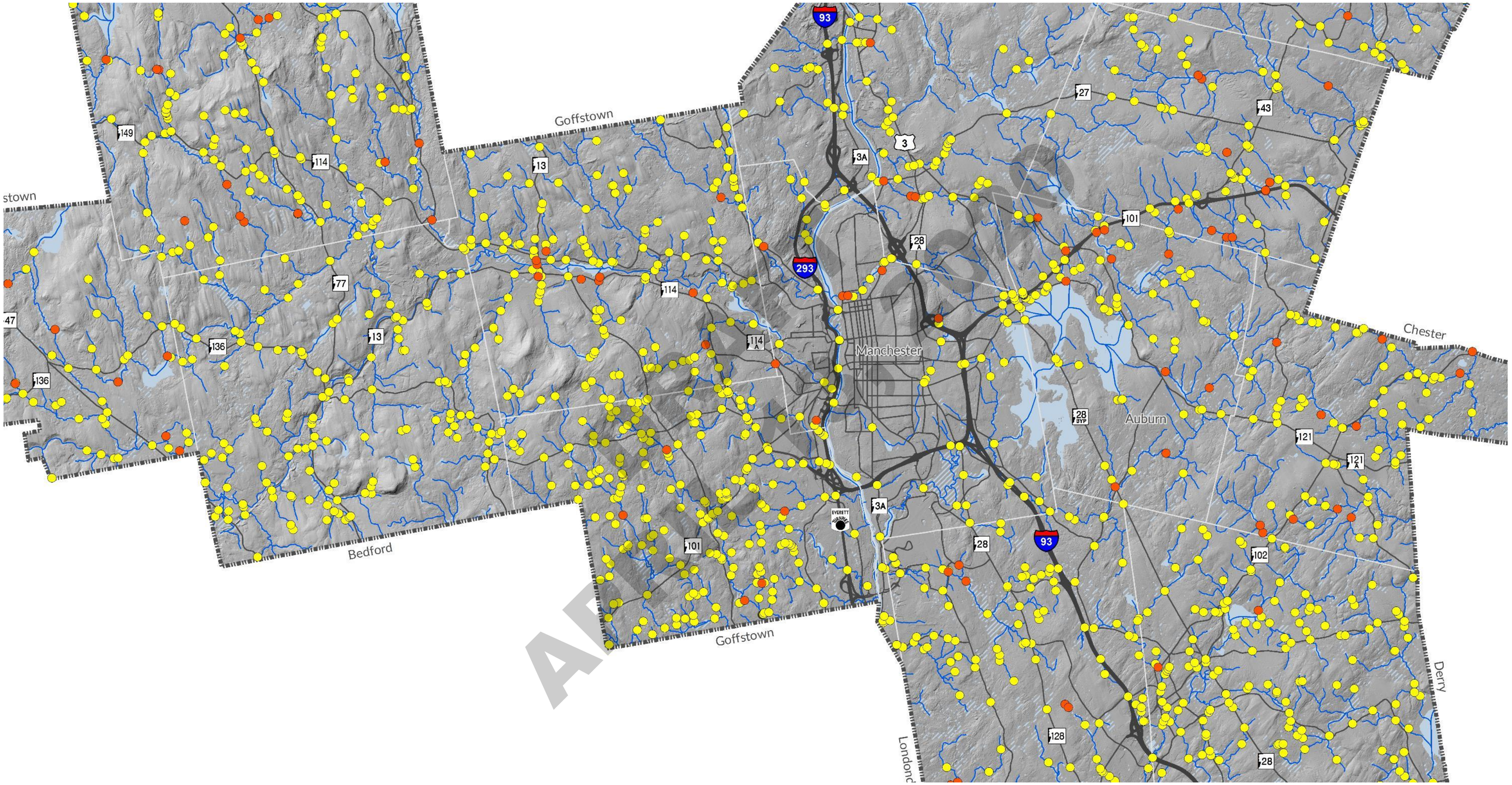
Assess risk by available data:

- Traffic Volume
- FEMA Flood Map
- Culvert Condition
- Structure Material (Is It Metal?)
- **Stream Crossing Identified by DPW or Road Agent**

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VULNERABILITY ASSESSMENT

PRIORITIZATION FINDINGS



APPROVED

VULNERABILITY ASSESSMENT

PRIORITIZED BY RISK FACTORS

Over 1,800 stream crossings in SNHPC region.

How to we look at risk to road network?

Prioritize stream crossings by risk factors.

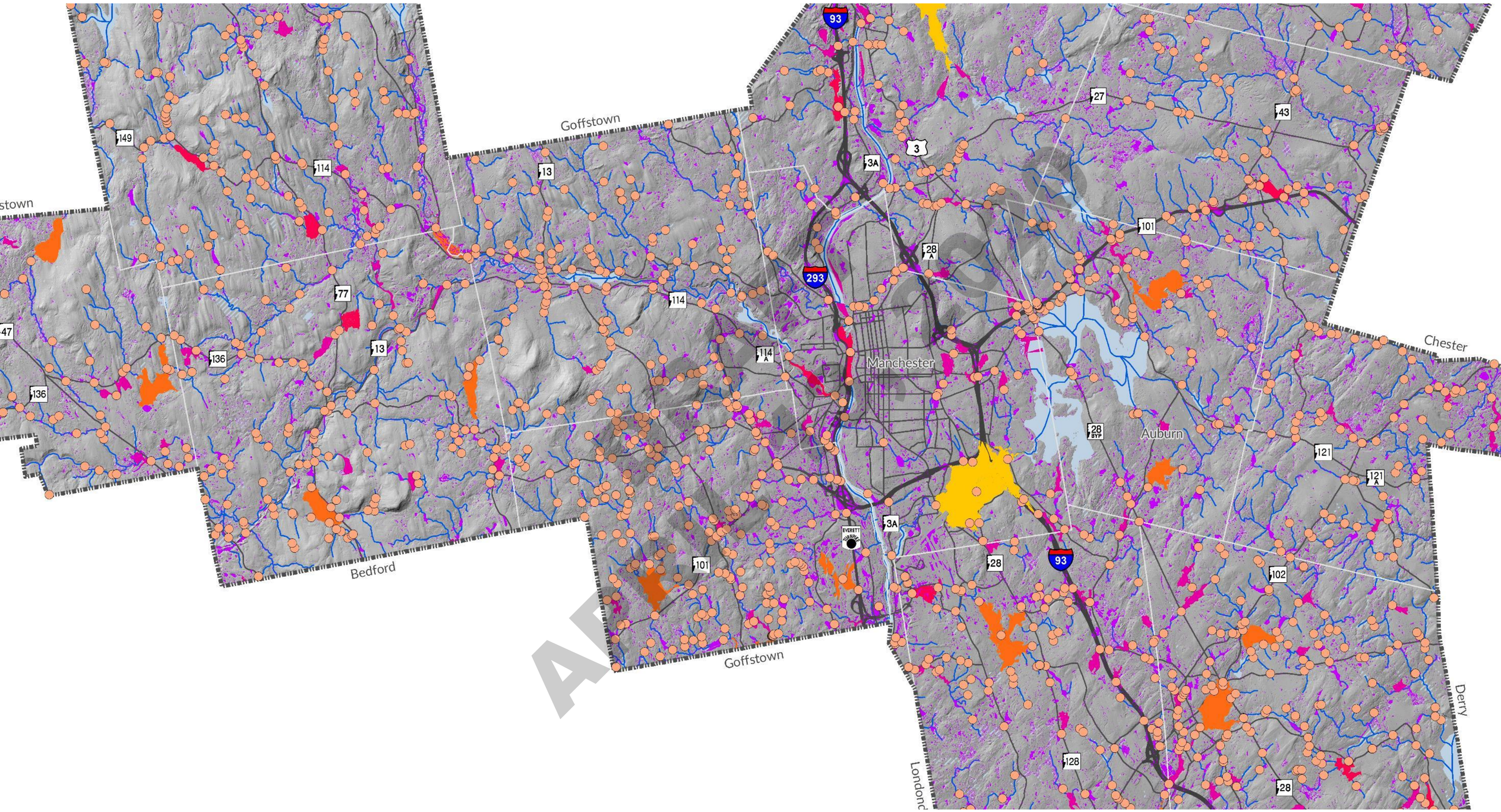
Assess risk by available data:

- Traffic Volume
- FEMA Flood Map
- Culvert Condition
- Structure Material (Is It Metal?)
- Stream Crossing Identified by DPW or Road Agent
- **Potential Upstream Ponding Area (New Analysis)**

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VULNERABILITY ASSESSMENT

PRIORITIZATION FINDINGS



DRAFT

VULNERABILITY ASSESSMENT

PRIORITIZED BY RISK FACTORS

Over 1,800 stream crossings in SNHPC region.

How to we look at risk to road network?

Prioritize stream crossings by risk factors.

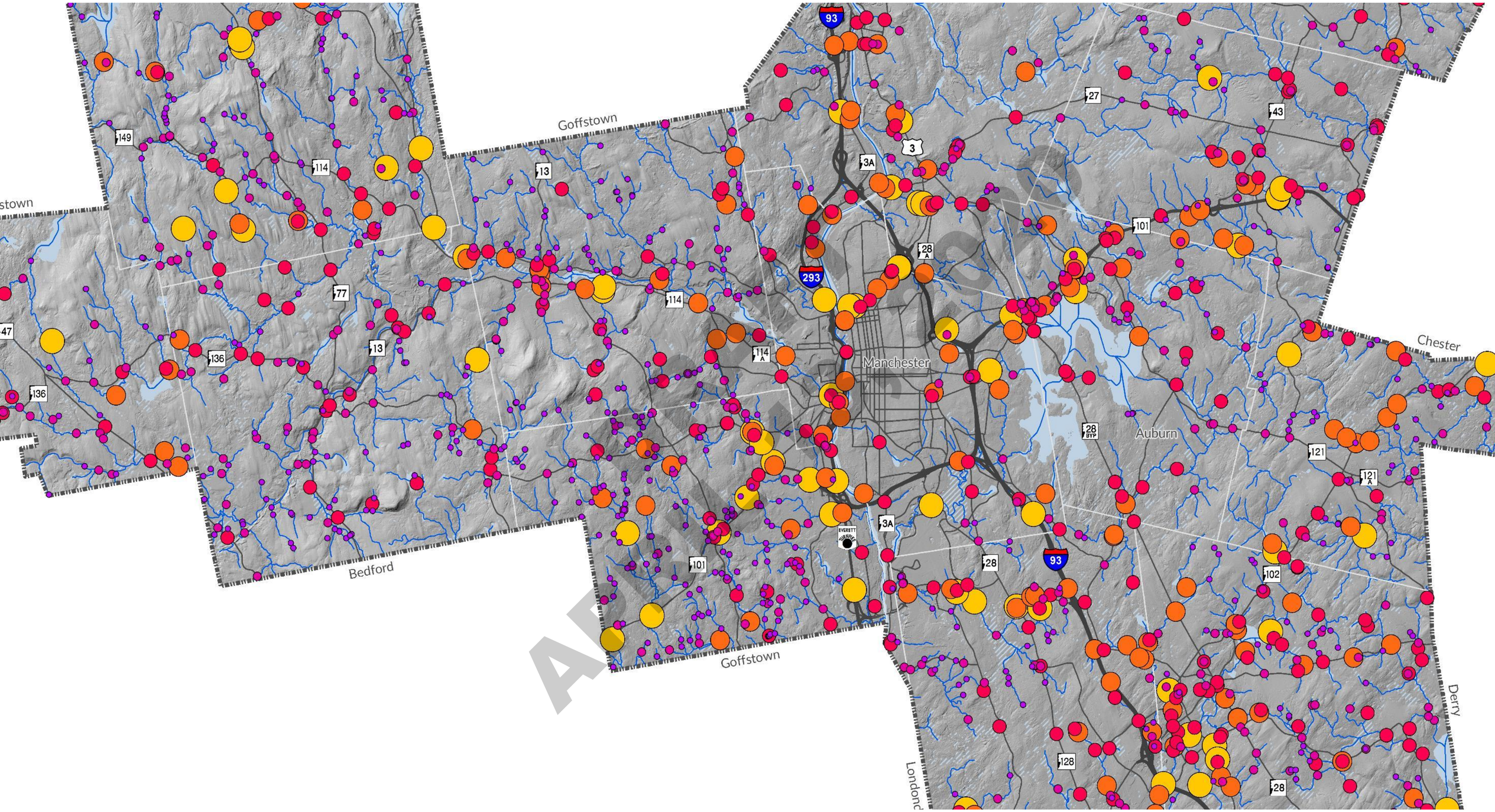
Assess risk by available data:

- Traffic Volume
- FEMA Flood Map
- Culvert Condition
- Structure Material (Is It Metal?)
- Stream Crossing Identified by DPW or Road Agent
- Potential Upstream Ponding Area (New Analysis)
- Documented Past Flood Incidents

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VULNERABILITY ASSESSMENT

PRIORITIZATION FINDINGS



ARCHIVE

VULNERABILITY ASSESSMENT

NEXT STEPS & DESIRED OUTCOMES

PRESENT ANALYSIS TO LOCAL MANAGERS

GATHER FEEDBACK ON THE SCORING

DISCUSS

DRAFT
APRIL 15, 2020

VULNERABILITY ASSESSMENT

NEXT STEPS & DESIRED OUTCOMES

STRATEGY ALIGNMENT ACROSS AGENCIES

INTEGRATION INTO PLANNING PROCESS

IDENTIFY ADAPTATION & MITIGATION STRATEGIES

DRAFT
APRIL 13, 2020

QUESTIONS AND COMMENTS:

James M. Vayo, AICP
Project Manager
jvayo@snhpc.org
(603)

DRAFT
APRIL 13, 2020

Southern New Hampshire Planning Commission 2018-2019 Regional Vulnerability Assessment

A Decision-Making Tool to Plan for a Changing Climate

Southern New Hampshire Planning Commission
438 Dubuque Street, Manchester, NH 03102-3546, Telephone (603) 669-4664 Fax (603) 669-4350
www.snhpc.org

Meeting Notes
Vulnerability Assessment Analysis Review
with Auburn, NH

May 1st, 2019
9:00 A.M.
Town Offices Conference Room – 47 Chester Road
Auburn, New Hampshire

DRAFT
APRIL 15, 2020

MEETING ATTENDEES		**STAFF PRESENT**
Bill Herman	Admin	James Vayo, AICP, Project Manager
Mike Williams	Fire	
Mike Dross	Road	
Ray Pelton	Police	
Carrie Rouleau-Cote	Building	

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TOPICS DISCUSSED

SNHPC staff member James Vayo presents findings of vulnerability assessment analysis and prioritization of stream crossings using scoring criterion derived through input by regional asset managers. Presentation materials included a map of stream crossing locations (with asset manager identified locations highlighted), upstream delineation of crossing ponding areas, and a map identifying stream crossing scoring quintiles. Vayo notes NH DES has an "Aquatic Resource Mitigation Fund" with over a million in grant funding available to assist towns with building stream crossings that connect sensitive streams and increase aquatic organism passage.

COMMENTS FROM TOWN STAFF

Admin. – Notes the Granite Bridge Project is passing through Auburn within the Route 101 Right of Way. There seem to be quite a few stream crossings that intersect with this proposed project. Suggest contacting Liberty Utilities to see if there is any proposed work to the stream crossings.

Building / Fire – Notes that Manchester Water is actively replacing stream crossings within the town, suggests contacting John O'Neil to discuss the vulnerability assessment and determine recent and proposed improvements to crossings.

Road – Notes there were major changes to landscape after a large flood and washout in an area upstream from Lake Massabesic. Questions the nature of responsibility for either restoring or documenting the changes to the waterway.

Building – Notes the colors for the scoring map are somewhat confusing. The colors are not in a gradient and are not assigned a value.

Admin – Suggest identifying stream crossings on DOT controlled roadways and crossings on rail trails separately from crossings managed by the town.
Building – Suggests a resident awareness program to help homeowners and others identify signs of trouble and how to care for a stream crossing to prevent damage and/or flooding.

Building – Notes that a new development near Cohas Road/Brook has been built, with a new culvert. Suggests adding it to the SADES database.

NEXT STEPS
SNHPC to share information about the online SADES Stream Crossing database

SNHPC to share recommendations with present staff when draft chapter is ready.

Meeting Ends at 10:03am.

Notes Taken By:
James Vayo, AICP
SNHPC Project Manager

DRAFT
APRIL 13, 2020

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Meeting Notes
Vulnerability Assessment Analysis Review
with Bedford, NH

May 22nd, 2019 @ 2:00 P.M.
Bedford Safety Complex
55 Constitution Avenue

MEETING ATTENDEES		STAFF PRESENT	
Lt. Mike Benard	Police	James Vayo	SNHPC
Jeanne Walker	DPW		

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TOPICS DISCUSSED

SNHPC staff member James Vayo presents findings of vulnerability assessment analysis and prioritization of stream crossings derived from the scoring criterion developed through regional asset manager input gathered in the fall of 2018. Presentation materials included a map of stream crossing locations (with asset manager identified locations highlighted), upstream delineation of stream crossing ponding areas, and a map identifying stream crossing scoring quintiles. Analysis review included description and detail sheets for the top scoring location. Vayo notes NH DES has funding available to assist towns with building stream crossings that connect sensitive streams and increase aquatic organism passage.

COMMENTS FROM TOWN STAFF

ID 4257 & 9125 have had prior flooding incidents resulting in washout.

Police & DPW – Meadow Road, while not a major roadway, is of regular concern. Frequently floods which triggers a series of tasks by city staff and is a draw on resources. In general, more intense storms result in a higher frequency of road closures.

ID 192 – Route 101 near Twin Brook Lane, set to be replaced in 2021. Crossings requires a temporary bypass be built while crossing is under construction. Will be a disruption to travel.

ID 9119 & 191 – On Route 114 and is in state control. Vayo notes he will check DOT scope of work for a study of 114 in Goffstown to determine in this crossing is within the scope. Intersection just to the south recently improved with the development of a Market Basket. ID191 received improvements in 2018 associated with the overhead bridge, no work to crossing.

ID 9011 – subject of repeated flooding.

ID 9126 – Boynton Street. Structure in poor condition, some ongoing discussion with DOT about possible replacement.

DRAFT APRIL 15, 2020

NEXT STEPS

SNHPC to share information about the online SADES Stream Crossing database

SNHPC to share recommendations with present staff when draft chapter is ready.

Meeting Ends at 2:48 pm.

Notes Taken By:
James Vayo, AICP
SNHPC Project Manager

DRAFT
APRIL 13, 2020

Southern New Hampshire Planning Commission
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Meeting Notes
Vulnerability Assessment Analysis Review
with Candia, NH

May 21st, 2019 @ 8:30 A.M.
Candia Police Department
74 High Street

MEETING ATTENDEES		STAFF PRESENT
Mike McGillen	Police	James Vayo, AICP, Project Manager
Dick Snow	SNHPC Comm.	

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TOPICS DISCUSSED

SNHPC staff member James Vayo presents findings of vulnerability assessment analysis and prioritization of stream crossings derived from the scoring criterion developed through regional asset manager input gathered in the fall of 2018. Presentation materials included a map of stream crossing locations (with asset manager identified locations highlighted), upstream delineation of stream crossing ponding areas, and a map identifying stream crossing scoring quintiles. Analysis review included description and detail sheets for the top scoring location. Vayo notes NH DES has funding available to assist towns with building stream crossings that connect sensitive streams and increase aquatic organism passage.

COMMENTS FROM TOWN STAFF

Snow – Crossing near Dube's Pond overtopped, culvert was damaged by Mother's Day Flood and then replaced.

Snow – Adams Road (ID #999909) also experienced a washout during the Mother's Day Flood.

Snow – There is a Beaver Dam just upstream of the culvert inlet on Crowley Road, potential risk of the dam letting go and washing out the crossing.

Snow – Upstream area of ponding off of Baker Road, ponding created by beaver activity.

McGillen – Suggest the ability to filter out stream crossings that are not controlled locally for better application to town maintenance activities.

Vayo – SNHPC has the capacity to accommodate the filter request, notes other municipalities have made similar requests. SNHPC will add a filter to a GIS online version of the scoring assessment.

Snow – Crossing on Pattern Hill Road (ID #5622) is at risk from beaver activity.

DRAFT APRIL 15, 2020

Snow – Dam upstream of crossing #5464 has potential for failure. Water has overtopped the crossing in the past.

Vayo – Asks about a non-documented crossing on Fogarty Road. McGillen notes it is a class 6 road and not maintained by the town. 4x4 vehicles make use of the road.

All – Discuss the ability for town staff to make use of the data for supporting capital improvement requests to replace some stream crossings identified in the prioritization results. Of particular interest for town investment is the crossing on Patten Hill Road (ID #5622) which has a large ponding area and could have a large impact if it failed.

McGillen – Notes that the stream crossing on North Road is set to be replaced using FEMA funding, when the stream crossing (ID #5464) is replaced, the temporary culvert pipes will be utilized in other parts of town.

NEXT STEPS

SNHPC to share information about the online SADES Stream Crossing database

SNHPC to share recommendations with present staff when draft chapter is ready.

Meeting Ends at 9:54 am.

Notes Taken By:
James Vayo, AICP
SNHPC Project Manager

DRAFT
APRIL 13, 2020

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Meeting Notes
Vulnerability Assessment Analysis Review
with Derry, NH

May 9th, 2019 @ 10:00 A.M.
Derry Municipal Center
14 Manning Street, Room 207

MEETING ATTENDEES		STAFF PRESENT
Alan Cote	Admin	James Vayo, AICP, Project Manager
Mike Gagnon	Fire	
Mike Fowler	DPW	

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TOPICS DISCUSSED

SNHPC staff member James Vayo presents findings of vulnerability assessment analysis and prioritization of stream crossings using scoring criterion derived through input by regional asset managers. Presentation materials included a map of stream crossing locations (with asset manager identified locations highlighted), upstream delineation of stream crossing ponding areas, and a map identifying stream crossing scoring quintiles. Analysis review included description and detail sheets for the top scoring location. Vayo notes NH DES has an "Aquatic Resource Mitigation Fund" with over a million dollars in grant funding available to assist towns with building stream crossings that connect sensitive streams and increase aquatic organism passage.

COMMENTS FROM TOWN STAFF

DPW/FIRE – ID# 6232 has incorrect road name and traffic count. While Madden Road is adjacent to this stream crossing, the crossing is on North High Street which has just over 10,000 cars per day. Location suffers from frequent flooding and needed structural repairs. Currently the stream crossing is included in the scope of work for the proposed Exit 4a project.

Admin – ID# 999971 has been replaced with the widening of Interstate 93. The new crossing has increased hydraulic capacity to address issues with flooding in the upstream area. The FEMA maps are now being updated to reflect the changes to the upstream area, there are possible downstream implications to this change.

DPW – ID# 6357 No experience issues with this crossing. It is a bridge and has a low risk of becoming obstructed and ponding. Suggest revising analysis to only look at crossings less than 10' in span and those which are under the control of the municipality.

DPW/Fire – ID# 5958 Currently having issues with beaver activity resulting in obstruction of the crossing.

Admin – ID# 5997 is in the Capital Improvement Plan for replacement in 2022.

DRAFT
APRIL 15, 2020

DPW – ID# 999965 No experience issues with this crossing. It is a bridge and has a low risk of becoming obstructed and ponding. Vayo notes that SNHPC will try and conduct a field assessment of the crossing this summer. Vayo states the ponding area is based on shared analysis with NHGS and NHDES, which the ponding area demonstrates the extents of potential ponding, it does not reflect any data about the hydraulic capacity of the stream crossing. Noting additional data is needed to determine capacity of the crossing and risk of ponding.

Admin – Fordway Extension and Highland Avenue become inundated regularly due to a downstream backup. Because there is no velocity to the water flow, there is no concern of a washout at crossing #6029 or #6030.

DPW – ID# 12510 on North Shore Road suffered damage during the Mothers Day Floods. Crossing stabilized and now under design with the NH DOT bridge aid program for replacement with a new box culvert in 2022.

DPW – ID# 1334 was replaced 8-10 years ago. Vayo notes SADES data is up to date and reflects newer crossing condition.

ADMIN/DPW – ID# 999975 on Gulf Road has a large retaining wall associated with the crossing.

DPW – ID# 200 crossing of Cato Brook near Jakes Autobody is sensitive to flooding issues.

Admin – Two crossings on Tsienneto Road to be upgraded as part of the scope of work, Exit 4a

All Staff – General recommendations for added funding/continuation of the State Bridge Aid Fund. Suggest regular programming of stream crossings to the Capital Improvement Program for the municipality. Staff note steady investments in stream crossing infrastructure over the years has resulted in increased resiliency of the road network.

NEXT STEPS

SNHPC to share information about the online SADES Stream Crossing database

SNHPC to share recommendations with present staff when draft chapter is ready.

Meeting Ends at 10:54am.

Notes Taken By:
James Vayo, AICP
SNHPC Project Manager

DRAFT APRIL 13, 2020

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Meeting Notes
Vulnerability Assessment Analysis Review
with Francestown, NH

May 9th, 2019 @ 3:30 P.M.
Francestown Selectman's Office
27 Main Street

MEETING ATTENDEES		STAFF PRESENT
Jamie Pike	Admin	James Vayo, AICP, Project Manager
Chief Micheal Dowd	Police	Maddie DiIonno, Associate Planner
Gary Paige	Road	

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TOPICS DISCUSSED

SNHPC staff member James Vayo and Maddie DiIonno present findings of vulnerability assessment analysis and prioritization of stream crossings using scoring criterion derived through input by regional asset managers. Presentation materials included a map of stream crossing locations (with asset manager identified locations highlighted), upstream delineation of stream crossing ponding areas, and a map identifying stream crossing scoring quintiles. Analysis review included description and detail sheets for the top scoring location. Vayo notes NH DES has an "Aquatic Resource Mitigation Fund" with over a million dollars in grant funding available to assist towns with building stream crossings that connect sensitive streams and increase aquatic organism passage.

COMMENTS FROM TOWN STAFF

Admin/Road – Suggest adding ability to filter out stream crossings that are not locally controlled or are larger than 10 feet in span. Staff noting larger span bridges are monitored by DOT bi-annually, so they regularly receive information on their condition.

Vayo notes purpose for inclusion of larger crossings is for coordination with NH DES efforts to develop hydraulic capacity analysis for crossings state-wide.

Road – Notes his current efforts to assess the condition of older stone box culverts to determine if any maintenance is needed. Mentions crossing ID# 1163 as one of the stone box culverts he recently when out to inspect.

Admin/Road – ID# 9470 currently has beaver activity which requires maintenance from Road Agent in order to control obstruction of inlet by beavers.

General – Suggest adding capacity to filter crossings by the age of the field assessment on record in the SADES database. Desire to update assessments where replacements have happened since.

DRAFT
APRIL 15, 2020

NEXT STEPS

SNHPC to share information about the online SADES Stream Crossing database

SNHPC to share recommendations with present staff when draft chapter is ready.

Meeting Ends at 4:25 pm.

Notes Taken By:
James Vayo, AICP
SNHPC Project Manager

DRAFT
APRIL 13, 2020

Southern New Hampshire Planning Commission
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Meeting Notes of the Vulnerability Assessment Analysis Review

with Goffstown, NH

March 7, 2019
9:00 A.M.
DPW Conference Room – 404 Elm Street
Goffstown, New Hampshire

DRAFT APRIL 13, 2020

MEETING ATTENDEES		**STAFF PRESENT**
Meghan Theriault, P.E.	DPW	James Vayo, AICP, Project Manager
Sarah Dinwoodie, P.E.	DPW	Pam Garrity, Planning Technician II
Eric Gustafson	DPW	
Eric Sorano (SP?)	Police	
Richard O'Brien	Fire	
Name?	Fire	

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TOPICS DISCUSSED

SNHPC staff present findings from a preliminary assessment and ranking of stream crossings along six criteria derived through input by regional asset managers. Presentation materials included a map of stream crossing locations with inputs highlighted, upstream ponding areas, and a map of scoring

COMMENTS FROM TOWN STAFF

Police/Fire – At about 2" of rain in a 1.5 to 2-hour period, we reach a threshold for localized flooding. Town is making headway in addressing localized flooding issues by improving some infrastructure and increasing coordination of dam controls. Town considering installation of an audible flood siren to provide flood prone properties downstream advanced warning of flooding.

DPW – Stormwater runoff is creating issues at the Kelly Street dam, working with operating company to improve dam operations during storm events. Town looking for funding opportunities to improve the storm gates at the dam as they are undersized.

DPW - Stream Crossing 4869: Mast Road at Mystic Brook, recently repaired to extend life.

DPW – Staff are seeking more options for funding stream crossing improvements.

Sarah D. noted DES is trying to obtain $400k for flood resiliency into their budget.

Staff General – Note that there is localized flooding in the area of Jackie's Flowers and attribute it to an underground which is part of the stormwater system and was not built to deal with runoff from new developments.

DPW – Eric Gustafson has data about the stream crossing locations that they have collected in recent years, includes GIS layer. Staff note that they send out interns in the summer to check on the condition of CMP culverts do to corrosion issues. (off pH water possibly?)

Comments added to the asset input stream crossing location map:

- SADES ID 1056 – Culvert replaced in 2010
- NEW SADES ID – Mast Rd West of Danis Park Rd, damaged by obstruction, repaired.
- SADES ID 5190 & 5191 – Past incident, damaged by obstruction, repaired.
- SADES ID 4874 – Culvert replaced in 2010
- New SADES IS – Just West of ID 5222, past incident of localized flooding.
- SADES ID 1040 – Overtopping, flooding of street downhill.
- SADES ID 999921 – Correct location but wrong location for the asset manager's input. Add ID at high school and move DPW input to high school.

SNHPC – James Vayo notes the scoring seems to favor the FEMA and past flood hazard values because of the nature of their overlapping condition. Asks if it would be of value to adjust the scoring so that AADT and Ponding have a larger emphasis.

Staff General – FEMA and Past Incidents are less of an issue for us as we already know where our problem areas are. Condition of stream crossings are a primary concern to us, and we would like to add points to the scoring for crossings which are made of metal. Our Corrugated Metal Pipe (CMP) crossings only last about 10 years before needing attention, adding 2 points for CMP crossings would help identify locations we will need to address in the future.

NEXT STEPS

SNHPC to ask Eric G. for shapefiles for culverts to determine if any of the data can be utilized for the vulnerability assessment.

SNHPC to share information about the SADES Stream Crossing protocol, QA/QC, and upcoming training.

SNHPC to share a revised scoring criteria for the stream crossings along.

SNHPC to share an updated scoring results list with Goffstown staff when revisions complete.

Meeting Ends at 10:10am.

Notes Taken By:
James Vayo, AICP
SNHPC Project Manager

DRAFT
APRIL 13, 2020

Southern New Hampshire Planning Commission
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Meeting Notes
Vulnerability Assessment Analysis Review
with Hooksett, NH

May 10th, 2019 @ 8:30 A.M.
Hooksett Dept. Public Works Office
210 West River Road

MEETING ATTENDEES		STAFF PRESENT
Earl Labonte	DPW	James Vayo, AICP, Project Manager
Matthew Lavoie	Bldg	
James Burkush	Fire	

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TOPICS DISCUSSED

SNHPC staff member James Vayo presents findings of vulnerability assessment analysis and prioritization of stream crossings using scoring criterion derived through input by regional asset managers. Presentation materials included a map of stream crossing locations (with asset manager identified locations highlighted), upstream delineation of stream crossing ponding areas, and a map identifying stream crossing scoring quintiles. Analysis review included description and detail sheets for the top scoring location. Vayo notes NH DES has funding available to assist towns with building stream crossings that connect sensitive streams and increase aquatic organism passage.

COMMENTS FROM TOWN STAFF

All – Suggest the ability to filter out stream crossings that are not controlled locally for better application to DPW maintenance activities.

Vayo – SNHPC has the capacity to accommodate the filter request, notes other municipalities have made similar requests. SNHPC will add a filter to a GIS online version of the scoring assessment.

Bldg/Fire – There is no detour route within town for Whitehall Road. If ID # 10934 or 10324 where to washout there would be no outlet in town. ID 10324 is associated with a dam which has the potential for failure and is an additional risk factor for the stream crossing.

Fire – Smyth Road Ice Pond has a small dam just upstream of an undocumented stream crossing, consider adding the crossing to your dataset.

Vayo – There were many crossings identified in Hooksett which are not included in the SADES database, we identified

All – Suggest filtering out crossings that are considered bridges by NH DOT as they are already inspected. Focus efforts of stream crossing analysis on informational gap for spans less than 10 feet.

DRAFT
APRIL 15, 2020

NEXT STEPS

SNHPC to share information about the online SADES Stream Crossing database

SNHPC to share recommendations with present staff when draft chapter is ready.

Meeting Ends at 9:28 pm.

Notes Taken By:
James Vayo, AICP
SNHPC Project Manager

DRAFT
APRIL 13, 2020

Southern New Hampshire Planning Commission
438 Dubuque Street, Manchester, NH 03102-3546, Telephone (603) 669-4664 Fax (603) 669-4350
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Meeting Notes
Vulnerability Assessment Analysis Review
with Manchester, NH

May 2nd, 2019
10:00 A.M.
Town Offices Conference Room – 475 Valley Street
Manchester, New Hampshire

MEETING ATTENDEES		STAFF PRESENT
Todd Connors	DPW	James Vayo, AICP, Project Manager
Owen Friend-Gray	DPW	Monique Duchesne, Assistant Planner
Chris Proulx	DPW	

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TOPICS DISCUSSED

SNHPC staff member James Vayo presents findings of vulnerability assessment analysis and prioritization of stream crossings using scoring criterion derived through input by regional asset managers. Presentation materials included a map of stream crossing locations (with asset manager identified locations highlighted), upstream delineation of crossing ponding areas, and a map identifying stream crossing scoring quintiles. Vayo also notes NH DES has an "Aquatic Resource Mitigation Fund" with over a million in grant funding available to assist towns with building stream crossings that connect sensitive streams and increase aquatic organism passage.

COMMENTS FROM TOWN STAFF

Owen – Not all stream crossings manage by the City of Manchester fall cleanly within the urban compact. Some crossings beyond the compact are also managed by city's Public Works Dept.

Owen – Notes stream crossing 10424 (S. Willow Street) is considerably overgrown which is obstructing view of the streambed and openings of the crossing structure.

All – Suggest filtering out bridges over a certain span, perhaps 20', from the scoring criteria.

Todd – Anything over 10' in length, is inspected by the state's DOT office. City hires Fuss & O'Neil to provide us with at more detailed inspecting of the city's over 30 bridges so the DPW can assemble a capital and action plan for addressing bridges with identified deficiencies. Because of the overlap of this work with the vulnerability assessment work, it would be more valuable for use to look specifically at crossings less than 10' in length as a separate process from the aforementioned process.

Owen – Ponding analysis does not truly reflect low risk of ponding for open bridge structures. More likely for the bridge to give way than to significantly restrict flow of stream.

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Vayo – Notes that NHGS is working on establishing the geomorphic capacity of

Todd – Crossings 12550 and 10212 (Ray Brook on Elm and River Rd), are important locations to us and they have scored highly in this prioritization list. This data in the assessment would be useful to us in making a case for a capital investment request for their replacement.

Owen/Todd – Triple Culvert on Bodewell Road (7226 or 7225) are deteriorated and susceptible to blockage. Would be worthwhile to review them for application for the ARM Grant. Crossing 5202 and 999942 on McQuestern Brook may also be good if not better candidates for the ARM grant.

All – Focus of field assessment of crossings should be on 9999xx near Keller Street and 999943 on Wellington Road.

NEXT STEPS

SNHPC to share information about the online SADES Stream Crossing database with DPW staff.

SNHPC to share recommendations with present staff when draft chapter is ready.

SNHPC to provide introduction to Colin Lawson from Trout Unlimited regarding ARM grant.

Meeting Ends at 11:25am.

Notes Taken By:
James Vayo, AICP
SNHPC Project Manager

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Southern New Hampshire Planning Commission
438 Dubuque Street, Manchester, NH 03102-3546, Telephone (603) 669-4664 Fax (603) 669-4350
www.snhpc.org

Meeting Notes
Vulnerability Assessment Analysis Review
with Windham, NH

May3rd, 2019 - 2:30 P.M.
Town Community Development Meeting Room
3 North Lowell Road
Windham, New Hampshire

MEETING ATTENDEES		STAFF PRESENT
Jack McCartney	DPW	James Vayo, AICP, Project Manager
Mike McQuire	Building	Pamela Garrity, Planning Technician II
Thomas Mc Pherson	Fire	
Gerry Lewis	Police	

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TOPICS DISCUSSED

SNHPC staff member James Vayo presents findings of vulnerability assessment analysis and prioritization of stream crossings using scoring criterion derived through input by regional asset managers, SADES database criteria, and state database criteria. Presentation materials included a map of stream crossing locations (with asset manager identified locations highlighted), upstream delineation of stream crossing ponding areas to illustrate conditions during an overtopping event, and a map identifying stream crossing scoring quintiles specific to the municipality. Vayo asks for feedback on the documentation, input on recommendations, and guidance on the value this content brings to decision-making for staff in planning for road network investments. Vayo also notes NH DES has an "Aquatic Resource Mitigation Fund" with over a million dollars in available funds to assist towns with building stream crossings that connect sensitive streams and increase aquatic organism passage.

COMMENTS FROM TOWN STAFF

DPW – High levels of Beaver Activity on West Shore Drive have resulted in obstruction of culvert with overtopping. Similar beaver activity resulted in a big release of water at Longmeadow Road (Washout?).

DPW – Notes that corrugated metal pipe culverts last 30 years before needing replacement.

Police – The Interstate 93 on-ramps to state Route 111 flooded during the Mother's Day floods (May 2006). Field Road was also submerged during that rain event.

DPW/Fire - Dam replacement upstream of stream crossing ID6943 underway. Surface water is currently drained, but area of standing water will return under the crossing with the completion of the dam.

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Fire – I-93 project required an active water treatment system to address runoff from the construction project. Tankers used to scrub pollution and sediment from runoff before returning to stormwater catchment areas.

DPW – Stream crossing ID6982 an upstream dam has the potential to fail and release water (near ID7193). The dam is private, and the town staff do not have control over when the dam will be repaired.

DPW – Notes stream crossing 7199 is being replace this summer.

All – Suggest more emphasis on the condition of identified roads at stream crossings. Are the embankments of crossings at risk of failure?

All – More attention needed on the state of dams and the activity of beavers as they can cause overtopping by obstruction of the upstream inlet.

NEXT STEPS

SNHPC to share information about the online SADES Stream Crossing database with DPW staff.

SNHPC to share recommendations with present staff when draft chapter is ready.

Meeting Ends at 3:25am.

Notes Taken By:
James Vayo, AICP
SNHPC Project Manager

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APPENDIX D: ASSET MANAGER INPUT

Documented asset manager input for stream crossings on a point-by-point basis.

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Appendix D: LOCAL ASSET MANAGER INPUT
LOCAL CONDITIONS LISTED BY TOWN

Crossing ID	Town	Road Name	State Route	Stream Name	Manager Comment	Assessment Action
195	Auburn	Manchester Rd	X	Perennial (No Name)	Culvert overtops at times, culvert undersized	Review SADES Data in field, Photos seem to not match culvert description
7248	Auburn	Londonderry Tpke		Cohas Brook	Adjacent culvert info missing from map, localized flooding, beaver issues downstream	Add new feature to SADES; Determine last assessment; Add to hotlist
8254	Auburn	Candia Rd		Intermittent (No Name)	Past Issues, Replaced in 2015	Determine Last Assessment
8255	Auburn	Rockingham Rd		Perennial (No Name)	Culvert close to overtopping	Add to Hotlist
8631	Auburn	Depot Rd		Clark Pond Brook	Noted box culvert near capacity at times	Add to Hotlist
8633	Auburn	Candia Rd		Maple Falls Brook	Past Issues, Replaced in 2007	Determine Last Assessment
8637	Auburn	Maple Farm Rd		Intermittent (No Name)	Replacement deferred, known flooding issues	Add to Hotlist
8638	Auburn	Hootsett Rd	X	Perennial (No Name)	NH DOT Replacement in 2017	Updated Assessment Needed
9019	Auburn	Chester Tpke		Hook Brook	Past Issues, Replaced in 2008	Determine Last Assessment
9056	Auburn	Wilsons Crossing Rd		Cohas Brook	New Culvert installed with change in Road Class - 2017	Determine Last Assessment
9059	Auburn	Bunker Hill Rd		Beaver Pond	Past Issues, Replaced in 2000	Determine Last Assessment
999901	Auburn	Hooksett Rd (Rt 121)	X	Intermittent (No Name)	Culvert Missing from SADES, 50ft west of Harvard Ave.	Add to SADES;
999902	Auburn	Pingree Hill Rd		Cohas Brook	Culvert Missing from SADES; Identified by asset manager; Minor Flooding	Add to SADES; Add to Hotlist
192	Bedford	Route 101		Pulpit Brook	To be replaced in 2020 - 2025; NH DOT Design	Notify Shane C. at DES
988	Bedford	Pulpit Rd		Intermittent (No Name)	Culvert New	Determine Last Assessment
989	Bedford	Pulpit Rd		Intermittent (No Name)	Culvert New	Determine Last Assessment
1348	Bedford	N Amherst Rd		Riddle Brook	Replaced in 2018; Assessment Incomplete	Notify Shane C. at DES
1349	Bedford	Campbell Rd		McQuade Brook	Replaced in 2018	Notify Shane C. at DES
1378	Bedford	Wallace Rd		Riddle Brook	Replaced in 2018; Assessment Incomplete	Notify Shane C. at DES
4249	Bedford	Liberty Hill Rd		Intermittent (No Name)	To be replaced in 2019	Notify Shane C. at DES
4251	Bedford	John Goffe Rd		Intermittent (No Name)	Replaced in 2017; Ongoing Overtopping	Updated Assessment Needed; Add to Hotlist
4256	Bedford	Liberty Hill Rd		Intermittent (No Name)	To be replaced in 2019	Notify Shane C. at DES
4840	Bedford	Wallace Rd		Intermittent (No Name)	Replaced in 2018	Notify Shane C. at DES
4889	Bedford	Wallace Rd		Intermittent (No Name)	Replaced in 2018	Notify Shane C. at DES
4896	Bedford	Gage Rd		Perennial (No Name)	To be replaced in 2019	Notify Shane C. at DES
5042	Bedford	Olde English Rd		Intermittent (No Name)	To be replaced in 2019	Notify Shane C. at DES
5044	Bedford	Gage Rd		Perennial (No Name)	To be replaced in 2019	Notify Shane C. at DES
5045	Bedford	Gage Rd		Intermittent (No Name)	To be replaced in 2019	Notify Shane C. at DES
5053	Bedford	Meadow Rd		Riddle Brook	Dirt Road; Regular Overtopping in Rain	Add to Hotlist
5105	Bedford	Chubbuck Rd		Riddle Brook	Past Issues, unsure if replaced	Verify Field Condition
5114	Bedford	Cider Mill Rd		McQuade Brook	Stated that NHDOT Replaced culvert, may be confused with culvert 5115, verify condition	Notify Shane C. at DES
5117	Bedford	Campbell Rd		Intermittent (No Name)	Replaced in 2018	Notify Shane C. at DES
5121	Bedford	Campbell Rd		Perennial (No Name)	Replaced in 2018	Notify Shane C. at DES
5200	Bedford	Eastman Rd		McQuesten Brook	Subject of ARM Grant, May be same as 9050	Notify Shane C. at DES
5203	Bedford	Wathen Rd		McQuesten Brook	Subject of ARM Grant, Culvert removed	No further action needed
6880	Bedford	Sandy Pond Pkwy		Perennial (No Name)	Replaced in 2018	Notify Shane C. at DES
9010	Bedford	Pulpit Rd		Intermittent (No Name)	Culvert New	Notify Shane C. at DES
9011	Bedford	Catesby Rd		McQuade Brook	Recurring Flooding at stream crossing	Add to Hotlist
9050	Bedford	Eastman Rd		McQuesten Brook	Subject of ARM Grant, May be same as 5200	Notify Shane C. at DES
9146	Bedford	Olde English Rd		Perennial (No Name)	To be replaced in 2019	Notify Shane C. at DES
9147	Bedford	Olde English Rd		Perennial (No Name)	To be replaced in 2019	Notify Shane C. at DES
999903	Bedford	S River Rd (Rt 3)	X	Perennial (No Name)	Culvert Missing from SADES, 300ft North of Back River Rd.	Add to SADES
999904	Bedford	New Boston Rd	X	Bowman Brook	Culvert Missing from SADES	Add to SADES; Add to Hotlist
999905	Bedford	Route 101	X	McQuade Brook	Culvert Missing from SADES	Add to SADES; Add to Hotlist
999906	Bedford	New Boston Rd	X	Pulpit Brook	Culvert Missing from SADES	Add to SADES; Add to Hotlist
196	Candia	Route 101	X	Wetland (No Name)	Culvert 100% submerged due to beaver activity	Add to Hotlist
197	Candia	Route 102	X	Wetland (No Name)	Culvert 100% submerged due to beaver activity	Add to Hotlist
5463	Candia	North Rd		Perennial (No Name)	Culvert failed in 2015, temporary courrigated plastic pipe of same diameter installed as town awaits grant from FEMA for replacements as an upsized box culvert.	Add to Hotlist
5464	Candia	North Rd		Perennial (No Name)	Culvert failed in 2017, temporary courrigated plastic pipe of same diameter installed as town awaits grant from FEMA for replacements as an upsized box culvert.	Updated Assessment Needed

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Appendix D: LOCAL ASSET MANAGER INPUT
LOCAL CONDITIONS LISTED BY TOWN

Crossing ID	Town	Road Name	State Route	Stream Name	Manager Comment	Assessment Action
5621	Candia	Critchitt Rd		Intermittent (No Name)	Recurring Flooding at stream crossing; Intend to use temps from Id 5463 & 5464 to replace once FEMA grant approved.	Notify Shane C. at DES
5622	Candia	Patten Hill Rd		Wetland (No Name)	At risk of washout from beaver dam failure; loss of culvert presents low risk to property or extended road closure; Stone box culvert valued as "Historic" in nature.	Add to Hotlist
6534	Candia	Patten Hill Rd		Intermittent (No Name)	Culvert replaced in 2014	Notify Shane C. at DES
6535	Candia	Depot Rd		Wetland (No Name)	Culvert replaced in 2014; Culvert upsized	Determine Last Assessment
999907	Candia	High St (Rt 27)	X	Wetland (No Name)	Culvert Missing from SADES	Add to SADES; Add to Hotlist
999908	Candia	Old Candia Rd (Rt 43)	X	Hook Brook	Culvert Missing from SADES	Add to SADES; Add to Hotlist
999909	Candia	Adams St		Wetland (No Name)	Culvert ID'd by local asset manager	Add to SADES; Add to Hotlist
999910	Candia	Brown Rd		Hook Brook	Culvert ID'd by local asset manager	Add to SADES; Add to Hotlist
999911	Candia	Brown Rd		Murray Mill Brook	Culvert ID'd by local asset manager; 600ft South of Winslow Rd	Add to SADES; Add to Hotlist
999912	Candia	Brown Rd		Murray Mill Brook	Culvert ID'd by local asset manager; 400ft West of Laliberte Ln	Add to SADES; Add to Hotlist
999913	Candia	Brown Rd		Murray Mill Brook	Culvert ID'd by local asset manager; 100ft East of Laliberte Ln	Add to SADES; Add to Hotlist
6160	Chester	Lane Rd		Wetland (No Name)	Planned Replacement 2019-2020	Add to SADES; Add to Hotlist
6505	Chester	Harantis Lake Rd		Harantis Pond	Overtopping; Recurring; Frequent	Add to Hotlist
6506	Chester	Cole Rd		Perennial (No Name)	DES 5yr Temp Replacement; Failed; Culvert would overtop frequently	Add to Hotlist
6773	Chester	E Derry Rd		Wetland (No Name)	Culvert Collapsed in 2017; Replaced	Updated Asssessment Needed
6779	Chester	Halls Village Rd		Wilson Brook	Overtopping; Minor Flooding	Add to Hotlist
6804	Chester	Halls Village Rd		Wetland (No Name)	Overtopping; Highly Frequent; CIP Deferred	Add to Hotlist
6868	Chester	Hanson Rd		Exeter River	Overtopping	Add to Hotlist
6917	Chester	Freemont Rd		Wetland (No Name)	Beaver Dams; Debris	Add to Hotlist
6945	Chester	Rod & Gun Club Rd		Wetland (No Name)	Overtopping; Large water flows noted	Add to Hotlist
6987	Chester	Edward's Mill Rd		Wetland (No Name)	Culvert Condition of Concern	Add to Hotlist
8732	Chester	Candia Rd		Wetland (No Name)	Culvert Condition of Concern	Add to Hotlist
999914	Chester	N Pond Rd		Wetland (No Name)	Culvert missing from SADES; Culvert Undersized, Local Flooding; Deferred	Add to SADES; Add to Hotlist
999915	Deerfield	Stage Rd	X	Intermittent (No Name)	Culvert Missing from SADES; 0.5mi North of Cotton Rd	Add to SADES
999916	Deerfield	Raymond Rd (Rt 107)	X	Intermittent (No Name)	Culvert Missing from SADES; Just south of Cotton Rd	Add to SADES
6232	Derry	N High St		Beaver (Horne's) Brook	Recurring Flooding at stream crossing	Add to Hotlist
6357	Derry	N Shore Rd		Manter Brook	Recurring Flooding at stream crossing	Add to Hotlist
999917	Derry	Chester Rd (Rt 102)	X	Intermittent (No Name)	Culvert Missing from SADES; Just north of N Shore Rd	Add to SADES
999918	Derry	Londonderry Tpke (Rt 28)	X	West Running Brook	Culvert Missing from SADES	Add to SADES
801	Francestown	Avery Rd		Intermittent (No Name)	Conditions concerns	Add to Hotlist
803	Francestown	Dodge Hill Rd		Intermittent (No Name)	Replaced in 2018	Notify Shane C. at DES
1117	Francestown	Bible Hill Rd		Whiting Brook	Replaced in 2018	Notify Shane C. at DES
1120	Francestown	Red House Rd		Perennial (No Name)	Culvert is failing, needs replacement	Add to Hotlist
1125	Francestown	Scoby Rd		Perennial (No Name)	Submerged; Condition and Replacement Concerns; Overtopping	Add to Hotlist
1150	Francestown	Old Country Rd		Collins Brook	Culvert in failed state; Temp Bridge in place; Town seeking NH DOT Bridge Aid funds	Add to Hotlist
1156	Francestown	School House Rd	X	Dinsmore Brook	Top priority for town; Recurring overtopping	Add to Hotlist
1158	Francestown	2nd NH Tpke N		Wetland (No Name)	Poor Culvert Condition poses risk	Add to Hotlist
1172	Francestown	Russell Station Rd		Rand Brook	Repairs made in 2018 to deck & rails	Notify Shane C. at DES
1177	Francestown	Poor Farm Road		Perennial (No Name)	Culvert new in 2007, TU wishes to replace now to increase AOP, Road Agent not motivated	No further action needed
1179	Francestown	Udall Rd	X	Perennial (No Name)	Culvert is failing, needs replacement	Add to Hotlist
1183	Francestown	Muzzey Rd		Perennial (No Name)	Nearby Dam is a point of interes with TU	Notify Shane C. at DES
1185	Francestown	Juniper Hill Rd		South Branch Piscataquog	Replaced through NH DOT Aid Program 2015	Notify Shane C. at DES
5260	Francestown	S New Boston Rd		South Branch Piscataquog	To be replaced in 2020; NH DOT Bridge Aid	Notify Shane C. at DES
5261	Francestown	Clarkville Rd		South Branch Piscataquog	Replaced through NH DOT Aid Program 2015	Notify Shane C. at DES
5272	Francestown	S New Boston Rd		Intermittent (No Name)	Conditions concerns	Add to Hotlist
9470	Francestown	Route 130	X	Perennial (No Name)	Culvert New	Updated Assessment Needed
999919	Francestown	Poor Farm Road		South Branch Piscataquog	ID's by Mgr; Culvert Located 0.2mi north of Todd Rd	Add to SADES
1034	Goffstown	Church St		Intermittent (No Name)	Undersized; Regularly overtopping	Add to Hotlist
1035	Goffstown	Depot St		Intermittent (No Name)	Undersized; Regularly overtopping	Add to Hotlist

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Appendix D: LOCAL ASSET MANAGER INPUT
LOCAL CONDITIONS LISTED BY TOWN

Crossing ID	Town	Road Name	State Route	Stream Name	Manager Comment	Assessment Action
4896	Goffstown	Mast Rd (Rt 114)	X	Perennial (No Name)	Flooding issues noted in Pinardville, possible source of condition	Add to Hotlist
999920	Goffstown	N Mast Rd (Rt 114)	X	Piscataquog River	Culvert Missing from SADES	Add to SADES
X	Goffstown	Park Ln (By High School)		Intermittent (No Name)	Undersized; Regularly overtopping	Add to SADES; Add to Hotlist
562	Hooksett	Benton Rd		Dalton Brook	New Culvert installed recently; Current assessment incomplete	Notify Shane C. at DES
10325	Hooksett	Chester Tpke		Moose Meadow Brook	Washout in 2006; Culvert replaced	Determine Last Assessment
999922	Hooksett	W River Rd (Rt 3A)	X	Intermittent (No Name)	Culvert Missing from SADES; 200ft west of Market Dr	Add to SADES
999923	Hooksett	Londonderry Tpke (Rt 28)	X	Messer Brook	Culvert Missing from SADES; 500ft south of Auburn Rd	Add to SADES
999924	Hooksett	Whitehall Rd (Rt 27)	X	Intermittent (No Name)	Culvert Missing from SADES; 800ft north of Rt 28	Add to SADES
999927	Hooksett	Martins Ferry Rd		Messer Brook	Culvert Missing from SADES; Site identified by Asset Manager	Add to SADES
999928	Hooksett	Rusty Rd		Messer Brook	Culvert Missing from SADES; Site identified by Asset Manager	Add to SADES
999929	Hooksett	Vindale Rd		Messer Brook	Culvert Missing from SADES; Site identified by Asset Manager	Add to SADES
999930	Hooksett	Hooksett Rd (Rt 3 & 128)	X	Intermittent (No Name)	Culvert Missing from SADES; 300ft north of Pleasant View Drive	Add to SADES
999931	Hooksett	Hooksett Rd (Rt 3 & 128)	X	Intermittent (No Name)	Culvert Missing from SADES; 300ft north of Shannon Rd	Add to SADES
999932	Hooksett	Hooksett Rd (Rt 3 & 128)	X	Intermittent (No Name)	Culvert Missing from SADES; 300ft south of University Circle	Add to SADES
999925	Hooksett	Londonderry Tpke (Rt 28)	X	Dalton Brook	New Culvert installed 2017; Not measurable	Notify Shane C. at DES
999926	Hooksett	Hooksett Rd (Rt 3)	X	Dalton Brook	Culvert Missing from SADES; Not measurable	Notify Shane C. at DES
999933	Hooksett	Barberry St		Messer Brook	Culvert Missing from SADES	Notify Shane C. at DES
999934	Hooksett	Heritage Dr		Messer Brook	Culvert Missing from SADES	Notify Shane C. at DES
999935	Hooksett	Garian Ln		Messer Brook	Culvert Missing from SADES	Notify Shane C. at DES
999936	Hooksett	Berry Hill Rd		Dalton Brook	Culvert Missing from SADES	Notify Shane C. at DES
1366	Londonderry	Harvey Rd		Little Cohas Brook	This input may be a duplicate of ID 6770	Verify field condition: After Replacement
5876	Londonderry	Wiley Hill Rd		Perennial (No Name)	Culvert developed sinkholes approx 2015, unclear if culvert was replaced	Conduct New Assessment
5877	Londonderry	Wiley Hill Rd		Perennial (No Name)	Past Issues, Replaced in 2018	Conduct New Assessment
6770	Londonderry	Harvey Rd		Little Cohas Brook	Culvert is in poor condition, replacement planned for 2018	Conduct New Assessment; After Installation
6839	Londonderry	Grenier Field Rd		Intermittent (No Name)	Culvert overtops at time, culvert undersized	Add to Hotlist
7227	Londonderry	Hunter Hill Rd		Cohas Brook	Culvert New	Determine Last Assessment
7228	Londonderry	Manter Mill Rd		Cohas Brook	Culvert New	Determine Last Assessment
999937	Londonderry	Wiley Hill Rd		Intermittent (No Name)	Culvert Missing from SADES; Identified by asset manager	Notify Shane C. at DES
999938	Londonderry	King Phillip Dr		Wetland (No Name)	Culvert Missing from SADES; Identified by asset manager	Add to SADES; Add to Hotlist
999939	Londonderry	King Charles Dr		Wetland (No Name)	Culvert Missing from SADES; Identified by asset manager	Add to SADES; Add to Hotlist
999964	Londonderry	South Rd		Beaver Brook	Culvert Missing from SADES; IDed by local asset managers	Add to SADES; Add to Hotlist
1058	Manchester	Rockland Ave		Rockland Creek	Culvert integrates into stormwater system; Regularly overtopping; Due to complexity of urban condition, no action	Add to Hotlist
12556	Manchester	Elm St		Roy Brook	Condition Concerns; Local Flooding	Add to Hotlist
12607	Manchester	River Rd		Roy Brook	Condition Concerns; Local Flooding	Add to Hotlist
999940	Manchester	Brown Ave (Rt 3A)	X	Intermittent (No Name)	Culvert Missing from SADES; Just north of Connecting Rd	Add to SADES
999941	Manchester	S Mammoth Rd (Rt 28A)	X	Intermittent (No Name)	Culvert Missing from SADES; 600ft north of Glen Bloom Dr	Add to SADES
999944	Manchester	Front St (Rt 3A)	X	Milestone Brook	Culvert Missing from SADES	Add to SADES
999942	Manchester	Daniel Webster Hwy (Rt 3 & 28)	X	Dorrs Pond	Culvert Missing from SADES; Noted Flooding	Add to SADES; Add to Hotlist
999943	Manchester	Wellington Rd		Intermittent (No Name)	Culvert Missing from SADES; Noted Debris	Add to SADES; Add to Hotlist
999945	Manchester	2nd St (Rt 3)	X	Intermittent (No Name)	Culvert Missing from SADES; Noted Flooding	Add to SADES; Add to Hotlist
999947	Manchester	Dunbarton Rd		Perennial (No Name)	Condition Concerns	Add to SADES; Add to Hotlist
1367	Merrimack	Woodward Rd		Baboosic Brook	To be replaced in 2020 to 2025	Notify Shane C. at DES
999948	New Boston	River Rd	X	Perennial (No Name)	Culvert Missing from SADES; Next to Hilldale Ln	Add to SADES; Add to Hotlist
905	Weare	S Stark Hwy		Moody Pong	Flooding; Man-made dam failed and pond drained out.	Add to Hotlist
906	Weare	East Rd		Wetland (No Name)	Minor Flooding; Beaver dams	Add to Hotlist
907	Weare	East Rd		Wetland (No Name)	Minor Flooding; Beaver dams	Add to Hotlist
919	Weare	Reservoir Dr		Piscataquog River	Minor Flooding; Beaver dams	Add to Hotlist

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Appendix D: LOCAL ASSET MANAGER INPUT
LOCAL CONDITIONS LISTED BY TOWN

Crossing ID	Town	Road Name	State Route	Stream Name	Manager Comment	Assessment Action
1073	Weare	Oak Hill Rd		Hillside Brook	Flooding; Culvert plugged by beaver dam debris; safety hazard in the event of a washout; data for SADES ID matched 1072	Notify Shane C. at DES
1100	Weare	Colby Rd		Otter Brook	Culvert New	Updated Assessment Needed
1106	Weare	Shady Hill Rd		Peacock Brook	Prior road washout due to beaver dam failure	Add to Hotlist
1107	Weare	Shady Hill Rd		Peacock Brook	Prior road washout due to beaver dam failure	Add to Hotlist
1253	Weare	Colby Rd		Huse Brook	Culvert New; Prior culvert collapsed	Updated Assessment Needed
5186	Weare	River Rd		Piscataquog River	Replaced in 1997, Primary Detour Route, Primary Heavy Truck Route, Currently needs replacement to carry 80k loads to match load rating of other culverts on the route.	Add to Hotlist
5213	Weare	Old Francestown Rd		Peacock Brook	Major Flooding 2006; To be replaced in 2020 - 2025; in NH DOT Design Phase; Photos Missing	Add to Hotlist
5214	Weare	Lull Rd		Peacock Brook	Major Flooding 2006; To be replaced in 2020 - 2025; in NH DOT Design Phase; Photos Missing	Add to Hotlist
5247	Weare	Peacock Hill Rd		Peacock Brook	Previous failures and replacement	Add to Hotlist
5253	Weare	John Connor Rd		Piscataquog River	Culvert regularly reaches capacity limits	Add to Hotlist
999949	Weare	Elanor Way		Huse Brook	Culvert Missing from SADES	Notify Shane C. at DES
999950	Weare	Concord Stage Rd (Rt 77)	X	Choate Brook	Large Bridge (Does this get assessed?)	Notify Shane C. at DES
999951	Weare	Mountain Rd		Buxton Brook	Culvert Missing from SADES	Notify Shane C. at DES
999952	Weare	Etta Ln		Wetland (No Name)	Local Flooding; 500ft south of Mountain Rd	Add to SADES; Add to Hotlist
999957	Weare	Boyce Rd		Intermittent (No Name)	Culvert Missing from SADES	Add to SADES; Add to Hotlist
999953	Weare	River Rd		Piscataquog River	Id'd as primary truck route and detour route	Add to SADES; Add to Hotlist
999954	Weare	Colby Rd		Piscataquog River	Id'd by DPW as missing	Add to SADES; Add to Hotlist
999955	Weare	N Riverdale Rd		Piscataquog River	Minor Flooding;	Add to SADES; Add to Hotlist
999956	Weare	Abijah Bridge Rd		Piscataquog River	Near capacity noted in the HMP; Larger stream crossing south of Lake Horace	Add to SADES; Add to Hotlist
6943	Windham	Moeckel Rd		Golden Brook	Conditions concerns; Former dam area	Add to Hotlist
6982	Windham	Golden Brook Rd		Golden Brook	Conditions concerns	Add to Hotlist
999958	Windham	Mammouth Rd (Rt 128)	X	Beaver Brook South	Culvert Missing from SADES	Add to SADES
999959	Windham	N Lowell Rd	X	Perennial (No Name)	Culvert Missing from SADES; 150ft north of Morrison Rd	Add to SADES
999960	Windham	Depot Rd	X	Perennial (No Name)	Culvert Missing from SADES; 300ft north of Frost Rd	Add to SADES
999961	Windham	Indian Rock Rd (Rt 111)	X	Perennial (No Name)	Culvert Missing from SADES; Just west of I-93 Overpass	Add to SADES
999962	Windham	Indian Rock Rd (Rt 111)	X	Perennial (No Name)	Culvert Missing from SADES; Just east of I-93 Overpass	Add to SADES
999963	Windham	Indian Rock Rd (Rt 111)	X	Golden Brook	Culvert Missing from SADES	Add to SADES

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APPENDIX E: SCORING SUMMARY AND DETAIL SHEETS

Prioritization criterion scored stream crossing summary and high priority stream crossing detail sheets indexed by municipality and alphabetical order.

Region-Wide (PDF Page E-1)
- Scoring Summary
- Crossing 6232
- Crossing 8732
- Crossing 5927
- Statistical Summary

Auburn (PDF Page E-8):
- Scoring Summary
- Crossing 8255
- Crossing 8637
- Crossing 195
- Statistical Summary

Bedford (PDF Page E-15):
- Scoring Summary
- Crossing 5053
- Crossing 9011
- Crossing 192
- Crossing 191
- Crossing 9126
- Statistical Summary

Candia (PDF Page E-24):
- Scoring Summary
- Crossing 196
- Crossing 5464
- Crossing 197
- Crossing 14741
- Crossing 999910
- Statistical Summary

Chester (PDF Page E-29):
- Scoring Summary
- Crossing 8732
- Crossing 6804
- Crossing 6868
- Statistical Summary

Deerfield (PDF Page E-39):
- Scoring Summary
- Crossing 6022
- Crossing 6669
- Crossing 7916
- Crossing 149
- Statistical Summary

Derry (PDF Page E-47):
- Scoring Summary
- Crossing 6232
- Crossing 999971
- Crossing 5997
- Crossing 6357
- Crossing 200
- Statistical Summary

Francestown (PDF Pg. E-56):
- Scoring Summary
- Crossing 1156
- Crossing 1158
- Crossing 15247
- Statistical Summary

Goffstown (PDF Page E-64):
- Scoring Summary
- Crossing 5190
- Crossing 5191
- Crossing 1034
- Crossing 1035
- Statistical Summary

Hooksett (PDF Page E-71):
- Scoring Summary
- Crossing 15109
- Crossing 999969
- Crossing 10248
- Crossing 10887
- Crossing 15110
- Statistical Summary

Londonderry (PDF Pg. E-80):
- Scoring Summary
- Crossing 5927
- Crossing 5877
- Crossing 5926
- Crossing 5930
- Crossing 6770
- Statistical Summary

Manchester (PDF Page E-89):
- Scoring Summary
- Crossing 12556
- Crossing 12607
- Crossing 999977
- Crossing 999942
- Crossing 999945
- Crossing 12603
- Statistical Summary

New Boston (PDF Page E-99):
- Scoring Summary
- Crossing 1075
- Crossing 999948
- Crossing 5189
- Statistical Summary

Weare (PDF Page E-106):
- Scoring Summary
- Crossing 900
- Crossing 901
- Crossing 999955
- Statistical Summary

Windham (PDF Page E-113):
- Scoring Summary
- Crossing 5758
- Crossing 6943
- Crossing 7199
- Crossing 6982
- Statistical Summary

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
6232	AADT<5,000	2	Yes	10	Yes	5	Floodway	5	Poor	10	Unknown	3	Metal	2	No	0	37
5927	AADT<20,000	6	No	0	Yes	5	Floodway	5	Poor	10	Overtop	5	Metal	2	No	0	33
8732	AADT<5,000	2	Yes	10	Yes	5	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	Yes	2	33
5877	AADT<5,000	2	Yes	10	No	0	Minimal Hazard	0	Poor	10	Overtop	5	Metal	2	No	0	29
196	AADT<30,000	8	Yes	10	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Metal	2	No	0	29
5464	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	29
15109	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Fair	5	Vulnerable	4	Not Metal	0	No	0	28
5926	AADT<20,000	6	No	0	Yes	5	Floodway	5	Fair	5	Overtop	5	Metal	2	No	0	28
8255	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	28
5190	AADT<20,000	6	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	28
999971	AADT>=30,000	10	No	0	Yes	5	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	28
901	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	28
900	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	28
6868	AADT<10,000	4	Yes	10	Yes	5	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	28
6804	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	28
9011	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	27
12607	AADT<10,000	4	Yes	10	No	0	100-Year Flood Zone	4	Fair	5	Vulnerable	4	Not Metal	0	No	0	27
12556	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	27
5053	AADT<1,000	0	Yes	10	Yes	5	Floodway	5	Good	0	Overtop	5	Metal	2	No	0	27
999969	AADT>=30,000	10	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	27
10248	AADT<30,000	8	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Overtop	5	Not Metal	0	No	0	27
5930	AADT<20,000	6	No	0	Yes	5	Floodway	5	Fair	5	Vulnerable	4	Metal	2	No	0	27
999955	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	27
6506	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Poor	10	Not Applicable	0	Metal	2	No	0	27
192	AADT<20,000	6	No	0	Yes	5	Floodway	5	Poor	10	Not Applicable	0	Not Metal	0	No	0	26
6770	AADT<10,000	4	Yes	10	No	0	Floodway	5	Fair	5	Pass	0	Metal	2	No	0	26
7199	AADT<20,000	6	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Overtop	5	Not Metal	0	No	0	25
999977	AADT<30,000	8	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	25
6943	AADT<1,000	0	Yes	10	Yes	5	Floodway	5	Fair	5	Not Applicable	0	Not Metal	0	No	0	25
15110	AADT<20,000	6	Yes	10	No	0	100-Year Flood Zone	4	Fair	5	Pass	0	Not Metal	0	No	0	25
8637	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	25
191	AADT<30,000	8	No	0	No	0	Floodway	5	Poor	10	Pass	0	Metal	2	No	0	25
10887	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Vulnerable	4	Not Metal	0	No	0	25
5758	AADT<1,000	0	No	0	Yes	5	Floodway	5	Poor	10	Unknown	3	Metal	2	No	0	25
197	AADT<30,000	8	Yes	10	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Metal	2	No	0	25
6357	AADT<5,000	2	Yes	10	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	25
5997	AADT<1,000	0	No	0	Yes	5	Floodway	5	Poor	10	Unknown	3	Metal	2	No	0	25
6022	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Vulnerable	4	Not Metal	0	No	0	25
999945	AADT<20,000	6	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	24
999942	AADT<20,000	6	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	24
195	AADT<5,000	2	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	24
12549	AADT<30,000	8	No	0	Yes	5	500-Year Flood Zone	3	Fair	5	Unknown	3	Not Metal	0	No	0	24
9126	AADT<10,000	4	No	0	No	0	Floodway	5	Poor	10	Unknown	3	Metal	2	No	0	24
10300	AADT<20,000	6	No	0	Yes	5	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	24

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
14741	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	No	0	24
230	AADT<20,000	6	No	0	No	0	Floodway	5	Poor	10	Unknown	3	Not Metal	0	No	0	24
10408	AADT<30,000	8	No	0	Yes	5	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	24
200	AADT<10,000	4	No	0	Yes	5	Floodway	5	Fair	5	Unknown	3	Not Metal	0	Yes	2	24
6669	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	24
6945	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	24
6109	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	24
5247	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	24
5214	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	24
5213	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	24
9053	AADT>=30,000	10	No	0	No	0	Floodway	5	Fair	5	Unknown	3	Not Metal	0	No	0	23
9119	AADT<20,000	6	No	0	No	0	Floodway	5	Poor	10	Not Applicable	0	Metal	2	No	0	23
5114	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Vulnerable	4	Not Metal	0	No	0	23
999873	AADT>=30,000	10	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	23
12603	AADT<20,000	6	No	0	No	0	500-Year Flood Zone	3	Poor	10	Vulnerable	4	Not Metal	0	No	0	23
10424	AADT<20,000	6	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	23
6982	AADT<1,000	0	Yes	10	No	0	Floodway	5	Fair	5	Unknown	3	Not Metal	0	No	0	23
999964	AADT<1,000	0	Yes	10	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	23
5995	AADT<1,000	0	No	0	Yes	5	Floodway	5	Poor	10	Unknown	3	Not Metal	0	No	0	23
5191	AADT<1,000	0	Yes	10	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	23
1035	AADT<1,000	0	Yes	10	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	23
1034	AADT<1,000	0	Yes	10	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	23
6987	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	23
6160	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	23
7916	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	No	0	23
149	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Not Metal	0	Yes	2	23
999957	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	23
999972	AADT>=30,000	10	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	22
9116	AADT<30,000	8	No	0	Yes	5	Floodway	5	Good	0	Vulnerable	4	Not Metal	0	No	0	22
11100	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Unknown	3	Not Metal	0	No	0	22
999910	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	22
12608	AADT<20,000	6	No	0	Yes	5	500-Year Flood Zone	3	Fair	5	Unknown	3	Not Metal	0	No	0	22
10209	AADT<20,000	6	No	0	Yes	5	500-Year Flood Zone	3	Fair	5	Unknown	3	Not Metal	0	No	0	22
999925	AADT<10,000	4	No	0	Yes	5	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	22
5994	AADT<5,000	2	No	0	No	0	Floodway	5	Poor	10	Unknown	3	Not Metal	0	Yes	2	22
12510	AADT<1,000	0	No	0	Yes	5	Floodway	5	Fair	5	Overtop	5	Not Metal	0	Yes	2	22
8911	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	22
6917	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Fair	5	Not Applicable	0	Metal	2	No	0	22
999956	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	22
14141	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	Yes	2	22
1073	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	22
1156	AADT<5,000	2	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	22
907	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	22
8257	AADT<30,000	8	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	21

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
999894	AADT<30,000	8	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	21
999963	AADT<30,000	8	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	21
9125	AADT<30,000	8	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	21
9051	AADT<30,000	8	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	21
10407	AADT<30,000	8	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	21
4251	AADT<1,000	0	Yes	10	No	0	Floodway	5	Good	0	Vulnerable	4	Metal	2	No	0	21
12540	AADT<20,000	6	No	0	No	0	500-Year Flood Zone	3	Poor	10	Not Applicable	0	Metal	2	No	0	21
232	AADT<20,000	6	No	0	No	0	Floodway	5	Fair	5	Unknown	3	Metal	2	No	0	21
10406	AADT<30,000	8	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	21
10403	AADT<30,000	8	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	21
10402	AADT<30,000	8	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	21
10249	AADT<20,000	6	No	0	Yes	5	Floodway	5	Fair	5	Pass	0	Not Metal	0	No	0	21
10933	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	Yes	2	21
6294	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	21
10217	AADT<1,000	0	No	0	Yes	5	Floodway	5	Fair	5	Vulnerable	4	Metal	2	No	0	21
5958	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Metal	2	No	0	21
999848	AADT<1,000	0	Yes	10	No	0	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	21
5471	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Not Metal	0	Yes	2	21
5622	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	21
8730	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	Yes	2	21
1075	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	21
15246	AADT<5,000	2	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	21
15247	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	21
1158	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	21
1253	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	21
193	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Metal	2	No	0	20
5100	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Poor	10	Vulnerable	4	Metal	2	No	0	20
999937	AADT<5,000	2	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	20
10258	AADT<20,000	6	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	20
6839	AADT<5,000	2	Yes	10	No	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	20
12530	AADT<1,000	0	No	0	No	0	Floodway	5	Poor	10	Unknown	3	Metal	2	No	0	20
999947	AADT<5,000	2	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	20
10938	AADT<20,000	6	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Pass	0	Not Metal	0	No	0	20
10299	AADT<1,000	0	No	0	Yes	5	Floodway	5	Poor	10	Not Applicable	0	Not Metal	0	No	0	20
6127	AADT<1,000	0	No	0	No	0	Floodway	5	Poor	10	Unknown	3	Metal	2	No	0	20
12610	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	No	0	20
10281	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	20
6200	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	20
10252	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Fair	5	Vulnerable	4	Metal	2	No	0	20
4869	AADT<20,000	6	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	20
999915	AADT<5,000	2	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	20
14944	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	20
905	AADT<10,000	4	Yes	10	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	20
15120	AADT<30,000	8	No	0	No	0	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	19

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
7058	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Fair	5	Overtop	5	Metal	2	No	0	19
9141	AADT<30,000	8	No	0	No	0	500-Year Flood Zone	3	Fair	5	Unknown	3	Not Metal	0	No	0	19
10409	AADT<20,000	6	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	19
10405	AADT<20,000	6	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	19
10404	AADT<20,000	6	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	19
10385	AADT<20,000	6	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	19
6674	AADT<20,000	6	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	19
6260	AADT<20,000	6	No	0	No	0	Floodway	5	Fair	5	Unknown	3	Not Metal	0	No	0	19
231	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	19
5876	AADT<5,000	2	Yes	10	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	19
6264	AADT<20,000	6	No	0	No	0	Floodway	5	Fair	5	Unknown	3	Not Metal	0	No	0	19
6414	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	19
6358	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	19
999889	AADT<20,000	6	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	19
10401	AADT<20,000	6	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	19
12606	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	19
12552	AADT<5,000	2	No	0	Yes	5	500-Year Flood Zone	3	Fair	5	Vulnerable	4	Not Metal	0	No	0	19
10324	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	19
15108	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	19
5194	AADT<10,000	4	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Metal	2	No	0	19
14742	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	19
4880	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Poor	10	Not Applicable	0	Metal	2	Yes	2	19
4874	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	19
6275	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	No	0	19
999916	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	19
7918	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	Yes	2	19
6772	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	19
6246	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	19
5543	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	19
6245	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	19
999948	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	19
5272	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	19
1120	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	Yes	2	19
5186	AADT<5,000	2	Yes	10	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	19
5253	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	19
6849	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Not Metal	0	Yes	2	19
2714	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	18
8254	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	18
999989	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
999966	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
999944	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	18
12526	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	18
5121	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Vulnerable	4	Not Metal	0	No	0	18
7062	AADT<30,000	8	No	0	No	0	Floodway	5	Good	0	Unknown	3	Metal	2	No	0	18

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
999990	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
999983	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
6941	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Poor	10	Unknown	3	Metal	2	No	0	18
999974	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
10387	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
999918	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	18
6262	AADT<20,000	6	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	18
6202	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	18
10417	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	18
6545	AADT<20,000	6	No	0	No	0	Floodway	5	Fair	5	Not Applicable	0	Not Metal	0	Yes	2	18
999939	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
999938	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
15380	AADT<1,000	0	No	0	No	0	Floodway	5	Poor	10	Unknown	3	Not Metal	0	No	0	18
999979	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
999869	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
10224	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	18
999850	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
1056	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	18
1040	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	18
7629	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	18
5441	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	18
7627	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	18
5189	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	Yes	2	18
999909	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
5621	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	18
1183	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	18
1163	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	18
6779	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	18
6505	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	18
9063	AADT<30,000	8	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Not Applicable	0	Not Metal	0	No	0	17
9390	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	17
8631	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	17
2780	AADT>=30,000	10	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	17
12599	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Fair	5	Vulnerable	4	Not Metal	0	No	0	17
12550	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	17
999886	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	17
12555	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	17
999958	AADT<10,000	4	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	17
999946	AADT<10,000	4	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	17
6124	AADT<10,000	4	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	17
5761	AADT<10,000	4	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	17
12704	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	17
10211	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Fair	5	Overtop	5	Not Metal	0	No	0	17
999917	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	17

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
6230	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	17
12551	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Fair	5	Overtop	5	Not Metal	0	No	0	17
6468	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	17
6355	AADT<1,000	0	No	0	Yes	5	Floodway	5	Fair	5	Not Applicable	0	Metal	2	No	0	17
5962	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	17
999876	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	17
8982	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Overtop	5	Metal	2	No	0	17
1242	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Metal	2	No	0	17
1079	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	Yes	2	17
999968	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	17
5196	AADT<1,000	0	No	0	No	0	Floodway	5	Poor	10	Not Applicable	0	Metal	2	No	0	17
8258	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	17
6531	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Not Metal	0	No	0	17
6276	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Not Metal	0	No	0	17
1179	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	17
919	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	17
7013	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	17
6774	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	17
9333	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
9332	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
9331	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
5201	AADT>=30,000	10	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Not Metal	0	No	0	16
999940	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
999961	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
999995	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
10410	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
15382	AADT<30,000	8	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	16
15381	AADT<20,000	6	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	Yes	2	16
12703	AADT<20,000	6	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	16
999941	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	16
10212	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Fair	5	Pass	0	Metal	2	No	0	16
6877	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Overtop	5	Metal	2	No	0	16
5096	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Vulnerable	4	Metal	2	No	0	16
6223	AADT<30,000	8	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	16
12699	AADT<20,000	6	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	16
8526	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
8261	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	16
8259	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	16
2715	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	16
6544	AADT<20,000	6	No	0	No	0	Floodway	5	Fair	5	Not Applicable	0	Not Metal	0	No	0	16
6263	AADT<20,000	6	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	16
6035	AADT<20,000	6	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	16
228	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	Yes	2	16
5999	AADT<20,000	6	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	16

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
6419	AADT<10,000	4	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Metal	2	No	0	16
12515	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Poor	10	Vulnerable	4	Not Metal	0	No	0	16
10259	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Vulnerable	4	Metal	2	No	0	16
10226	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Vulnerable	4	Metal	2	No	0	16
5269	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	16
999863	AADT<1,000	0	No	0	Yes	5	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	16
7899	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	16
6023	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Poor	10	Vulnerable	4	Not Metal	0	No	0	16
957	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	16
8731	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	Yes	2	16
7624	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Metal	2	No	0	16
999994	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
5469	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	16
926	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	16
6535	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	16
5472	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	16
5266	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	16
1126	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Overtop	5	Metal	2	No	0	16
14740	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	16
1125	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	16
7197	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	15
7063	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Vulnerable	4	Metal	2	No	0	15
6130	AADT<30,000	8	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	15
6592	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	15
12604	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	15
12525	AADT<20,000	6	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	15
11102	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Fair	5	Pass	0	Not Metal	0	No	0	15
10257	AADT<20,000	6	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	15
8633	AADT<5,000	2	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	15
9060	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	15
9059	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	15
9058	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
999900	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	15
12602	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Fair	5	Unknown	3	Not Metal	0	No	0	15
15383	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Unknown	3	Not Metal	0	Yes	2	15
10302	AADT<1,000	0	No	0	No	0	Floodway	5	Poor	10	Not Applicable	0	Not Metal	0	No	0	15
8367	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	15
1058	AADT<5,000	2	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	15
2873	AADT<30,000	8	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	15
6227	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
5819	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
9146	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
9127	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	Yes	2	15
5105	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	15

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
999923	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	15
10894	AADT<5,000	2	No	0	No	0	500-Year Flood Zone	3	Fair	5	Overtop	5	Not Metal	0	No	0	15
10889	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Overtop	5	Not Metal	0	No	0	15
1057	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	15
8916	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	15
10251	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	15
201	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	15
12511	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	15
6034	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	15
6032	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	15
5996	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	15
9056	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	15
10235	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
6512	AADT<1,000	0	No	0	Yes	5	500-Year Flood Zone	3	Good	0	Unknown	3	Metal	2	Yes	2	15
6261	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
6201	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	15
5275	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	15
6197	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
1083	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	15
5236	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Metal	2	No	0	15
1198	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
777	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
7622	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
1256	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
1107	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	15
1106	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	15
9470	AADT<5,000	2	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	15
1150	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	15
5843	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
6161	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	Yes	2	15
6112	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
6108	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
7200	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	14
7198	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	14
15122	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	No	0	14
9140	AADT<30,000	8	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Not Metal	0	No	0	14
999978	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	14
5826	AADT<20,000	6	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	14
5757	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	Yes	2	14
1366	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Unknown	3	Metal	2	No	0	14
999997	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	14
15121	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	No	0	14
2804	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	14
12700	AADT<10,000	4	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	14

DRAFT 2020

Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
4838	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Vulnerable	4	Not Metal	0	No	0	14
6980	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Vulnerable	4	Not Metal	0	No	0	14
12601	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	14
5250	AADT<10,000	4	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	14
1252	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	14
999932	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	14
8910	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14
12554	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14
999931	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	14
999930	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	14
999926	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	14
5270	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14
999922	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	14
5222	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14
1363	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14
12524	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	14
7248	AADT<10,000	4	Yes	10	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	14
8462	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Metal	2	No	0	14
8262	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Metal	2	Yes	2	14
12546	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	14
5221	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14
4887	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	14
4877	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	14
11097	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	14
10308	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	14
10306	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	14
6412	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	14
5280	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14
807	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14
5245	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	14
6411	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	14
6033	AADT<20,000	6	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	14
7901	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14
14744	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	Yes	2	14
6029	AADT<10,000	4	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	14
999950	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	14
5187	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	14
14743	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	Yes	2	14
1103	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	14
1072	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	14
934	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	No	0	14
6277	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	14
7917	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	Yes	2	14
7902	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	14

DRAFT 4/13/2020

Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
7625	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	14
12493	AADT<5,000	2	No	0	No	0	Floodway	5	Fair	5	Not Applicable	0	Metal	2	No	0	14
1180	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	Yes	2	14
1189	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	14
7619	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	14
7609	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	14
6949	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	14
6846	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	14
10309	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	14
6986	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	14
949	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	No	0	14
10264	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Overtop	5	Not Metal	0	No	0	14
10262	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Metal	2	No	0	14
10260	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	14
5771	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Metal	2	No	0	13
2874	AADT<20,000	6	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Metal	2	No	0	13
404	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	13
7230	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	13
7196	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	13
999992	AADT<5,000	2	No	0	No	0	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	13
9118	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Vulnerable	4	Not Metal	0	No	0	13
7229	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	13
999991	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	13
999880	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	13
5203	AADT<1,000	0	No	0	Yes	5	500-Year Flood Zone	3	Good	0	Unknown	3	Metal	2	No	0	13
999899	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	13
999877	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	13
999868	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	13
5200	AADT<1,000	0	No	0	Yes	5	500-Year Flood Zone	3	Good	0	Unknown	3	Metal	2	No	0	13
5118	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
4926	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	13
999857	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	13
14580	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Unknown	3	Not Metal	0	No	0	13
10317	AADT<1,000	0	No	0	No	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	13
6699	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Metal	2	Yes	2	13
2779	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	13
770	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	13
9429	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	13
5229	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	13
14942	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	13
10255	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	13
9334	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	13
9067	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	13
9066	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	13

DRAFT 4/13/2020

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
9065	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	13
9064	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	13
8260	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	13
999860	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	13
9688	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	13
9389	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	13
9388	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	13
9077	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	13
10253	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Fair	5	Pass	0	Metal	2	No	0	13
7060	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	13
5227	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	13
5825	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Unknown	3	Not Metal	0	No	0	13
5821	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
7022	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Vulnerable	4	Not Metal	0	No	0	13
773	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	13
999882	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	13
10939	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	13
10323	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
5820	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Unknown	3	Not Metal	0	No	0	13
5770	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
1101	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	13
9412	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
1071	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
906	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	13
2781	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	13
1130	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	13
7883	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	13
10250	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	13
5463	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	13
6946	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
6773	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	13
10236	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Vulnerable	4	Metal	2	No	0	13
999984	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	13
999965	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	13
12508	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Vulnerable	4	Not Metal	0	No	0	13
12488	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
12487	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Vulnerable	4	Not Metal	0	No	0	13
6028	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	13
5960	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	13
9068	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
9019	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	13
8528	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	13
999906	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999904	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12

DRAFT 8/18/2020

Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
4882	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	12
5202	AADT<20,000	6	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Not Metal	0	No	0	12
5258	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	12
999885	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
9142	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
5041	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	12
1033	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	12
771	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	12
14437	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	12
999862	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
12701	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Fair	5	Not Applicable	0	Not Metal	0	No	0	12
999982	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
5257	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	12
1236	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	12
5268	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
5233	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
999884	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999864	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
800	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
5232	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
5769	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	12
1350	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	12
999980	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999959	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
6981	AADT<5,000	2	No	0	No	0	Floodway	5	Fair	5	Not Applicable	0	Not Metal	0	No	0	12
999988	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
5230	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
5925	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	12
999898	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999897	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999887	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999861	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999874	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999954	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
1161	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	12
1121	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	12
4879	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
5923	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Not Metal	0	No	0	12
999949	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999896	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
1065	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	Yes	2	12
801	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	12
999851	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
12553	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	12

DRAFT 3/30/2020

Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
11101	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Metal	2	No	0	12
999970	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
9173	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	12
999853	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
12529	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Pass	0	Metal	2	No	0	12
5511	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Not Metal	0	No	0	12
8034	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
2771	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	12
10886	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	12
6673	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Pass	0	Metal	2	No	0	12
6597	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Metal	2	No	0	12
8023	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
8022	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
8727	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
7930	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999924	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
8021	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
8020	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
7631	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
7612	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
5442	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
12484	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	12
999999	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
10935	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Good	0	Overtop	5	Not Metal	0	No	0	12
7601	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
7600	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
12532	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	12
6417	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Metal	2	No	0	12
7597	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
6293	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	12
1334	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	12
10237	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	12
5998	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	12
999975	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
10210	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	12
999981	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
7596	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
960	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
10283	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Metal	2	No	0	12
10263	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Metal	2	No	0	12
6508	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
10325	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	12
6415	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
6265	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	12

DRAFT 4/13/2020

Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
6231	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
999883	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999888	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
9124	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	11
12963	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	11
1200	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	11
798	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	11
5134	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	11
2803	AADT<20,000	6	No	0	No	0	Floodway	5	Good	0	Pass	0	Not Metal	0	No	0	11
2802	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	11
4254	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Vulnerable	4	Not Metal	0	No	0	11
9447	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	11
922	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	11
5223	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	11
5188	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	11
1041	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	11
1104	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	11
1068	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	11
8909	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	11
4876	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	11
2836	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	11
12702	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Metal	2	No	0	11
1122	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	11
999893	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	11
7056	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Fair	5	Pass	0	Not Metal	0	No	0	11
2719	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	11
5470	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	11
7245	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	11
10256	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Fair	5	Unknown	3	Not Metal	0	No	0	11
7064	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Pass	0	Metal	2	No	0	11
961	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	11
5198	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	11
6026	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	11
959	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	11
6027	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	11
12696	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Vulnerable	4	Metal	2	No	0	11
10280	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Vulnerable	4	Metal	2	No	0	11
6509	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	11
11098	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	11
11096	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Fair	5	Pass	0	Not Metal	0	No	0	11
10893	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Vulnerable	4	Not Metal	0	No	0	11
999986	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	11
999936	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	11
8634	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	11

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
1233	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	10
1232	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	10
5263	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
5218	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
5195	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
999875	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
1378	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	10
1348	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	10
999998	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
999879	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
1110	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	10
9114	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Overtop	5	Not Metal	0	No	0	10
5231	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	10
5228	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	10
6111	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	10
6878	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Overtop	5	Not Metal	0	No	0	10
1181	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	10
5193	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	10
1185	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	10
1147	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	10
1010	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	10
12965	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	10
5054	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	10
1117	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	10
1369	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Not Metal	0	No	0	10
999890	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
5043	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Metal	2	No	0	10
4992	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Overtop	5	Not Metal	0	No	0	10
999907	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
4988	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Metal	2	No	0	10
4896	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	10
4252	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Overtop	5	Not Metal	0	No	0	10
5440	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	10
6702	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	10
14554	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Not Applicable	0	Not Metal	0	No	0	10
10315	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	10
6228	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Not Applicable	0	Not Metal	0	No	0	10
5418	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	10
7610	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	10
6024	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Overtop	5	Not Metal	0	No	0	10
2832	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	10
7026	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	10
2701	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	10
5416	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	10

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
6128	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Metal	2	No	0	10
6126	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Metal	2	No	0	10
6125	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Metal	2	No	0	10
999987	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
10411	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
7193	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
7061	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
6944	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
10282	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	10
10233	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	10
12697	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	10
12514	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Not Applicable	0	Not Metal	0	No	0	10
12509	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
12507	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
10304	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	10
15111	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Not Applicable	0	Not Metal	0	No	0	10
5763	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	10
10265	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	10
10223	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Pass	0	Not Metal	0	No	0	10
10221	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Overtop	5	Not Metal	0	No	0	10
10891	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Not Metal	0	No	0	10
10247	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Overtop	5	Not Metal	0	No	0	10
999901	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
999856	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
8636	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	10
8256	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	10
14945	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	10
9055	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	10
8465	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	10
6352	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	10
6031	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
6030	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
14438	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	9
1085	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
990	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
987	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
797	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
12964	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
1212	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	9
1128	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
1087	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	9
1084	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	9
776	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
908	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	9

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
5242	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
5241	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
5226	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
5225	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
5184	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
9428	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
6869	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
9421	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	9
1166	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	Yes	2	9
8980	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
4870	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
1042	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
5261	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
5220	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
9414	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
5260	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
1175	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
4885	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
1174	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
9413	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
5284	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
5224	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
2800	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
1292	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
1285	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	9
1100	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
1099	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
5101	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	9
2801	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	9
4840	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	9
9115	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	9
6532	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
5219	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
1052	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
1051	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
10423	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
10416	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
10415	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
10414	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
6229	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
2778	AADT<20,000	6	No	0	No	0	500-Year Flood Zone	3	Good	0	Not Applicable	0	Not Metal	0	No	0	9
12545	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	9
6635	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Pass	0	Not Metal	0	No	0	9
12966	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	9

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
1067	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
1066	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
929	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
1131	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
5443	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
5414	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	9
1129	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
2743	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	9
2742	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	9
6668	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
2738	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
8728	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
8013	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
7632	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
7623	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
7621	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
6703	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
10422	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Vulnerable	4	Not Metal	0	No	0	9
6914	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Pass	0	Not Metal	0	No	0	9
6726	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
6725	AADT<20,000	6	No	0	No	0	500-Year Flood Zone	3	Good	0	Pass	0	Not Metal	0	No	0	9
6723	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	9
910	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
902	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
898	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
9303	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	9
9172	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	9
7620	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
7615	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
7018	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	9
9015	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	9
8984	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Vulnerable	4	Not Metal	0	No	0	9
5125	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	9
5115	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	9
5061	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	9
5059	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Vulnerable	4	Not Metal	0	No	0	9
5058	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	9
5056	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	9
7608	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
6670	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
6266	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
5961	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
12698	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	9
10215	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Pass	0	Not Metal	0	No	0	9

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SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
6507	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	9
2688	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Metal	2	No	0	9
10225	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	9
6469	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Metal	2	Yes	2	9
10934	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	9
10937	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Pass	0	Not Metal	0	No	0	9
10936	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	9
7055	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
7025	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	9
5762	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
5477	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
7249	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Pass	0	Not Metal	0	No	0	9
8742	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Not Applicable	0	Not Metal	0	No	0	9
8741	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Not Applicable	0	Not Metal	0	No	0	9
8337	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	9
5047	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Metal	2	Yes	2	9
4987	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	9
4853	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	9
4259	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Vulnerable	4	Not Metal	0	No	0	9
4258	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Vulnerable	4	Not Metal	0	No	0	9
4257	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Vulnerable	4	Not Metal	0	No	0	9
962	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
6359	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
999891	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
5239	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	8
5237	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	8
8740	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
6947	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
6851	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	Yes	2	8
1220	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Metal	2	No	0	8
1088	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Metal	2	No	0	8
6775	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
1076	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
22	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	8
14436	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
999908	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
8019	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
9417	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
14435	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
9430	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
8915	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
8907	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
5234	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
5192	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8

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SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
10421	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	8
6852	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	8
999866	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999858	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
5254	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	8
6771	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	8
999973	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999951	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
1182	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1177	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1176	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
4868	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
999872	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999871	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999865	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
12539	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
10316	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
10301	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
9117	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	8
999867	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
9147	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
9123	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
9052	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	8
9050	AADT<1,000	0	No	0	Yes	5	500-Year Flood Zone	3	Good	0	Pass	0	Not Metal	0	No	0	8
9010	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
9009	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
8983	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
8018	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
8017	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
8001	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
7900	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	8
958	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	8
148	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	8
8780	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	Yes	2	8
7603	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
5541	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
6543	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	8
10388	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
1162	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1160	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1157	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1153	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1250	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1055	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
1050	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
11099	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	8
999996	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
10294	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
6259	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	8
924	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
913	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
7020	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	8
999985	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999960	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999881	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999993	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999967	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999854	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
9074	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
9061	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
8335	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
6876	AADT<1,000	0	No	0	No	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
5297	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	8
5055	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	8
6533	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
5415	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
10305	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
10220	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
10214	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
7099	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	8
6462	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
6295	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Fair	5	Not Applicable	0	Not Metal	0	No	0	8
1152	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1123	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1044	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1043	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
774	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
999976	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999935	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999934	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999933	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999892	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999859	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999852	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
6225	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	8
6224	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	8
5822	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	8
999878	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
9175	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
7024	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	8
5760	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	8
5479	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Metal	2	No	0	8
14943	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
7012	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
5262	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	7
5238	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	7
6247	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
1238	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	7
6850	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	7
2712	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	7
12605	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	7
6911	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
1005	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	7
1004	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	7
9464	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
9463	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
9445	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
2741	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
7616	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
7614	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
1192	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
1069	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
1003	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
778	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Not Applicable	0	Metal	2	Yes	2	7
1095	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
1112	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	7
923	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	7
920	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	7
909	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	7
9456	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
9455	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
9438	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
9437	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
9436	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
9419	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
5183	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
1291	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
935	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
2848	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
6875	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	7
5296	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	7
5295	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	7

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
5084	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
5071	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
5057	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	7
5049	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	7
2861	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	7
3198	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
7602	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
6667	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
955	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
15123	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	7
1184	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	7
1154	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	7
1186	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	7
9446	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
1059	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
1047	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
1046	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
772	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
765	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
1019	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	7
4931	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	7
1030	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
1024	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	Yes	2	7
10932	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Metal	2	No	0	7
12541	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Good	0	Pass	0	Not Metal	0	No	0	7
10419	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
6593	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
6637	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	7
6636	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	7
7228	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	7
7227	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	7
6678	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	7
911	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
903	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
899	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
896	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
7021	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	7
5518	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	7
5483	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	7
9062	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
5048	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	7
4995	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
4927	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	7
4906	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	7

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SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
4890	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Vulnerable	4	Not Metal	0	No	0	7
4852	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	7
4236	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	7
1349	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
10261	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	Yes	2	7
6418	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
549	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
5879	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	7
5878	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Metal	2	No	0	7
5824	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
5765	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Metal	2	No	0	7
5764	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
5756	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
11103	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
6870	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	6
7226	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	6
1310	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
1077	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
5474	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	6
5473	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	6
5267	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
8912	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	6
7225	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	6
229	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	Yes	2	6
995	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
1201	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	6
799	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	6
194	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	Yes	2	6
9122	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	6
5104	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	6
4889	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	6
4905	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Metal	2	No	0	6
4866	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Metal	2	No	0	6
4235	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Metal	2	No	0	6
7919	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	6
956	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	6
4930	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Metal	2	No	0	6
10298	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	6
12528	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Not Metal	0	No	0	6
6700	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Metal	2	No	0	6
5248	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
5197	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
1114	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	6
928	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
927	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
1096	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	6
8369	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
5481	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Not Metal	0	No	0	6
6983	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
5417	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
6847	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
6213	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
6211	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
6210	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
9418	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1155	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1148	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1119	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
9466	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
5271	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1244	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
2860	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
8024	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
7931	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
2736	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
2689	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
9416	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1037	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
775	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1213	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1211	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1206	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1195	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1082	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1074	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
986	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1259	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1093	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1070	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
937	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
936	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
932	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
5274	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
4939	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
9149	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
9143	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	5
2749	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
8739	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	5

DRAFT 4/13/2020

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
8016	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
7618	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
8979	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
6676	AADT<5,000	2	No	0	No	0	500-Year Flood Zone	3	Good	0	Pass	0	Not Metal	0	No	0	5
6768	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	5
5264	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	5
5217	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	5
5216	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	5
9021	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
9020	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
8527	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
8370	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
8368	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
9073	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	5
9022	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
8632	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	5
6879	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Pass	0	Not Metal	0	No	0	5
5126	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	5
5113	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5109	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5108	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5106	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5103	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	5
5102	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	5
5095	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5089	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5083	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
5070	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	5
5063	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5062	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5060	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	5
5046	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	5
5044	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5034	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5033	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5020	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4991	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4990	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4989	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4938	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4839	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4250	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Pass	0	Not Metal	0	No	0	5
4245	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4239	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Pass	0	Not Metal	0	No	0	5

DRAFT 4/13/2020

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
8738	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	5
6950	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	5
6919	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
6807	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6778	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6777	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6504	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6250	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	5
6248	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6215	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6214	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6212	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6162	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	5
6110	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
7617	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
7607	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
7594	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
12491	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	5
12485	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	5
10311	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Pass	0	Not Metal	0	No	0	5
10310	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	5
10279	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	5
10234	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Pass	0	Not Metal	0	No	0	5
10222	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Pass	0	Not Metal	0	No	0	5
10213	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
7098	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
6510	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6465	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
6464	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6463	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	5
6413	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6354	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1188	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
1187	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1172	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
1165	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
1159	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1151	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
1149	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1118	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	5
802	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
5124	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4888	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
4881	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5

DRAFT 3/31/20

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
4875	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4871	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
4867	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
1053	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	5
1045	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1039	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1027	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1025	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1020	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1008	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
767	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6672	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Not Applicable	0	Metal	2	No	0	5
6638	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6222	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	5
6129	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	5
5924	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	5
5870	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	5
5753	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Not Applicable	0	Metal	2	No	0	5
1228	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1226	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1225	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1224	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1219	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1210	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1196	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1001	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
5215	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
5182	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1290	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1288	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	5
1258	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1102	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1097	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
931	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
918	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
917	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
915	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
912	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
7059	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
7023	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Pass	0	Not Metal	0	No	0	5
6978	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
6977	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
2881	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	4
5841	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
4943	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	4
2847	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	4
7630	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
7606	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
5265	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
1036	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	4
6701	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
1002	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	4
9410	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	Yes	2	4
5281	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	4
5256	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
9016	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
5131	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5130	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5119	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5117	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5116	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5110	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5088	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5087	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5085	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5019	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
4994	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	4
4945	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
4895	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
4253	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
4244	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
4240	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
4237	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
5123	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
6679	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
6226	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
1127	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
805	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
5252	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
5251	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
5235	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
1263	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
1098	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
1081	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
930	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
7194	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
7101	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
7100	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
7057	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	4
7019	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
6984	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6534	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
7628	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
7626	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9459	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
10413	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9465	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9468	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9069	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9057	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9018	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
8635	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
8464	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
8371	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
8336	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
8334	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9442	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9121	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5298	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Pass	0	Not Metal	0	No	0	3
5120	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5032	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4944	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4892	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4891	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4854	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Pass	0	Not Metal	0	No	0	3
4841	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4256	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4249	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4246	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4238	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
989	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
988	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6274	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5842	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5840	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5465	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5462	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5444	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
2782	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6948	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6918	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6848	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3

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SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
6806	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6805	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6776	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6249	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6159	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6157	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
7613	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
7611	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
7605	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
7604	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
7599	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
7598	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
7595	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5542	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
12492	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
10303	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6467	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6466	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6416	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6353	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6292	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6291	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6267	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6199	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6198	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5957	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5755	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9427	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5273	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1178	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1164	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9434	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9433	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
8908	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4928	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4886	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4884	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4883	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4878	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4873	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4872	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1249	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1248	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1054	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
1049	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1038	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1032	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1031	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1029	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1028	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1026	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1023	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1022	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1021	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1011	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
994	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
993	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
992	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
991	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
769	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
766	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
10892	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1342	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
10296	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
10295	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6769	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6675	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Pass	0	Not Metal	0	No	0	3
6594	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5875	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5874	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5873	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5823	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9444	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9443	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9426	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Not Applicable	0	Not Metal	0	No	0	3
9423	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5282	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5278	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5276	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1243	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1241	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1240	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1239	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1237	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1235	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1231	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1229	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1227	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
1223	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1222	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1221	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1215	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1214	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1209	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1207	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1205	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1204	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1203	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1202	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1199	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1197	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1193	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1080	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1007	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1006	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
999	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
998	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
997	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
996	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
806	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9467	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9458	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9457	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9454	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9453	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9452	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9451	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9450	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9449	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9448	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9441	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9440	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9439	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9422	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9415	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5246	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5244	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5243	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5240	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1289	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1286	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1257	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3

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SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
1255	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1115	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1113	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1109	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1094	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1092	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1091	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1090	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1089	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
933	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
916	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
914	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
897	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
869	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6942	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Pass	0	Not Metal	0	No	0	3
5482	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5480	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5478	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
2834	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
2833	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
2817	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
5512	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
6107	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
5540	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
2737	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
1124	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
6698	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
1234	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
1111	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
8460	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
2713	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
474	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
6880	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
5133	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	Yes	2	2
4855	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Metal	2	No	0	2
5466	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
9431	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
1048	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
1018	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
5872	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	Yes	2	2
5871	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Metal	2	No	0	2
1230	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
1218	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
1086	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2

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Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
1078	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
1000	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
1254	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
1108	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
1105	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
7195	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	Yes	2	2
8463	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
8461	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
9017	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
6874	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5135	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5132	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5129	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5128	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5112	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5111	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5107	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5099	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5098	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5097	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5086	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5082	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5045	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5042	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5031	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5026	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5004	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4993	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4948	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4947	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4946	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4937	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4936	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4857	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4856	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4851	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4260	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4255	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
4248	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
4247	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4243	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
4242	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
4241	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
8028	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0

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APRIL 3, 2020

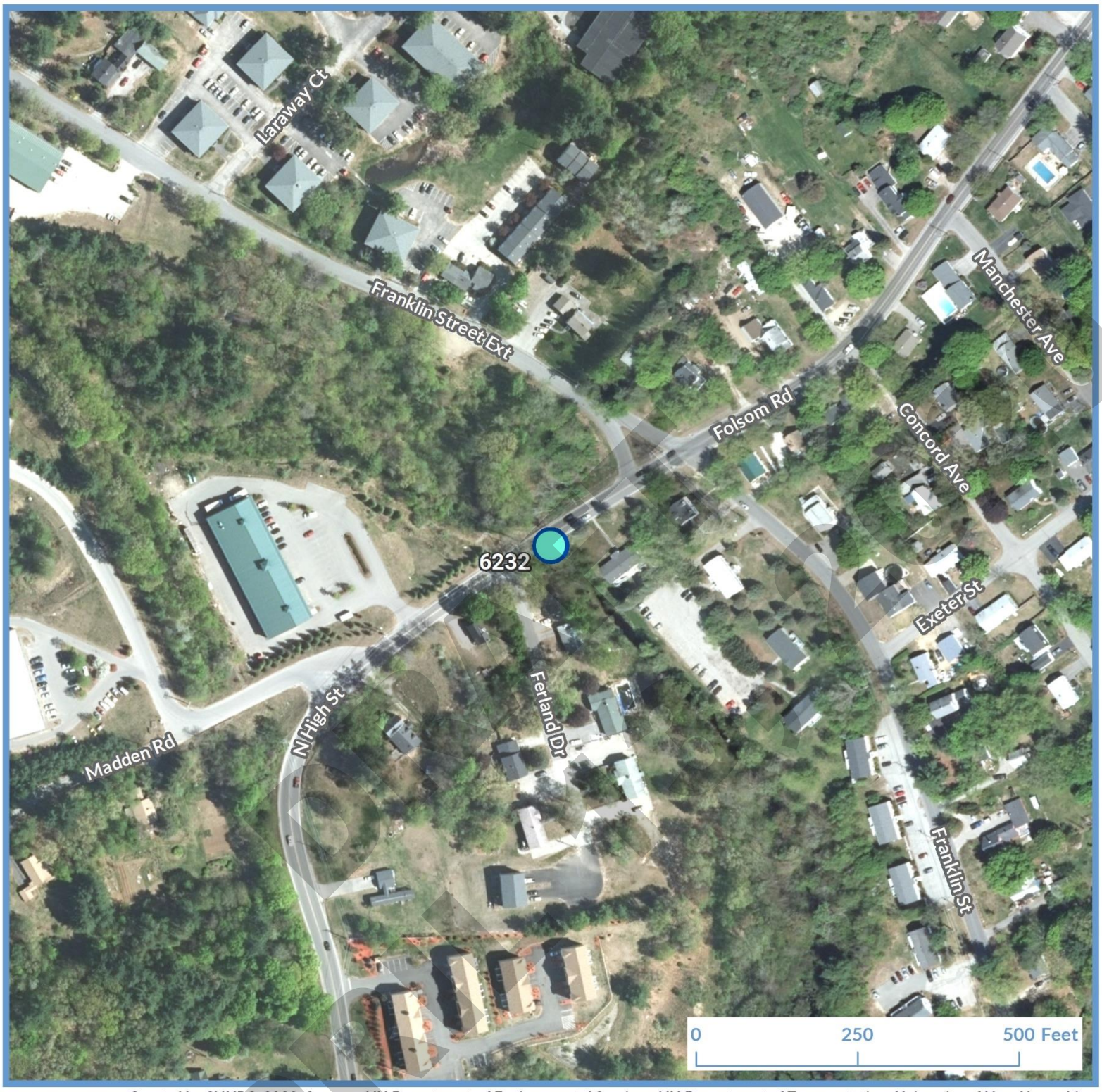
SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
5510	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
5509	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
5303	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6985	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6916	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6251	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6216	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6163	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6158	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
7928	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
12486	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
10266	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
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10218	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
6511	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
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5959	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
5754	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
1116	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
803	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
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8914	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
8913	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5122	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
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1251	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
1009	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
768	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
7247	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
7246	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
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6596	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
6595	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
5869	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6724	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
5127	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
804	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
921	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
904	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
7192	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
7102	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6979	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0

DRAFT 4/13/2020

Region-Wide Prioritization Results

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
6940	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5759	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
2835	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0

DRAFT
APRIL 13, 2020



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Derry, NH		Stream Crossing Detail Sheet			SADES ID 6232
Prioritization Score	**37**	**Traffic Volume**	**<5,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**Madden Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Beaver Brook**
		Flood Zone Category	**Floodway**	**Structure Type**	**Elliptical Steel Corrugated Culv.**
		Culvert Condition	**Poor**	**Crossing Width**	**7.00'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**07/11/2016**

SNHPC

Detail Sheet Created: January 17, 2020

APPROVED



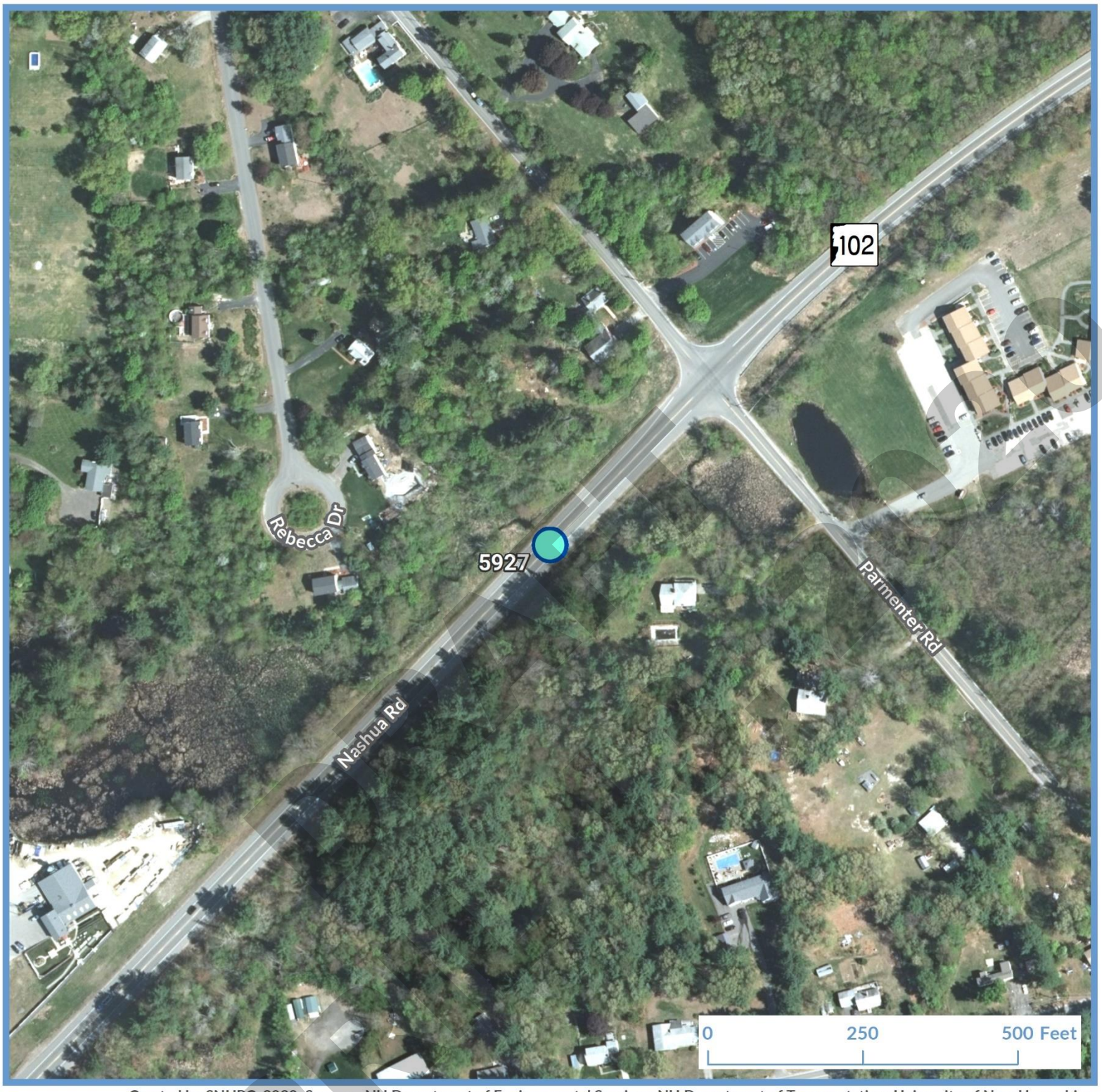
Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Chester, NH		Stream Crossing Detail Sheet			SADES ID 8732
Prioritization Score	**33**	**Traffic Volume**	**<5,000**	**Crossing Type**	**Wetland**
		Asset Manager ID'd	**Yes**	**Road Name**	**Candia Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Data**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Plastic Smooth Round Culvert**
		Culvert Condition	**Poor**	**Crossing Width**	**2.00'**
		10-Yr Hydraulic Vuln.	**Not Applicable**	**Open Height**	**2.00'**
		Crossing Material	**Not Metal**	**Obstruction**	**Wood and Sediment**
		Beaver Activity	**Yes**	**Assessment Date**	**7/20/2017**

SNHPC

Detail Sheet Created: January 17, 2020

API



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Londonderry, NH		Stream Crossing Detail Sheet			SADES ID 5927
Prioritization Score	**33**	**Traffic Volume**	**<20,000**	**Crossing Type**	**Stream**
SNHPC		**Asset Manager ID'd**	**No**	**Road Name**	**Route 102 (Nashua Road)**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Nesenkeag Brook**
		Flood Zone Category	**Floodway**	**Structure Type**	**Steel Corrugated Round Culvert**
		Culvert Condition	**Poor**	**Crossing Width**	**3.00'**
		10-Yr Hydraulic Vuln.	**Overtop**	**Open Height**	**3.00'**
		Crossing Material	**Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**06/29/2016**

Detail Sheet Created: January 17, 2020

DRAFT

Region-Wide Stream Crossing Statistical Summary

SNHPC Region

Traffic Volume

Count	Totals
AADT>=30,000	17
AADT<30,000	46
AADT<20,000	95
AADT<10,000	142
AADT<5,000	240
AADT<1,000	1048
TOTAL:	1588

Flood Zone

Floodway	201
100-Yr Flood Zone	425
500-Yr Flood Zone	53
Minimal Hazard	909
TOTAL:	1588

Culvert Condition

Poor	119
Fair	188
Good	1086
Unknown	195
TOTAL:	1588

10-Yr Vulnerability

Category	Count
Overtop	74
Vulnerable	84
Unknown	977
Pass	99
Not Applicable	354
TOTAL:	1588

Culvert Material

Metal	317
Not Metal	1271
TOTAL:	1588

Flood Hazard

ID'd	368
Not ID'd	1220
TOTAL:	1588

Asset Manager

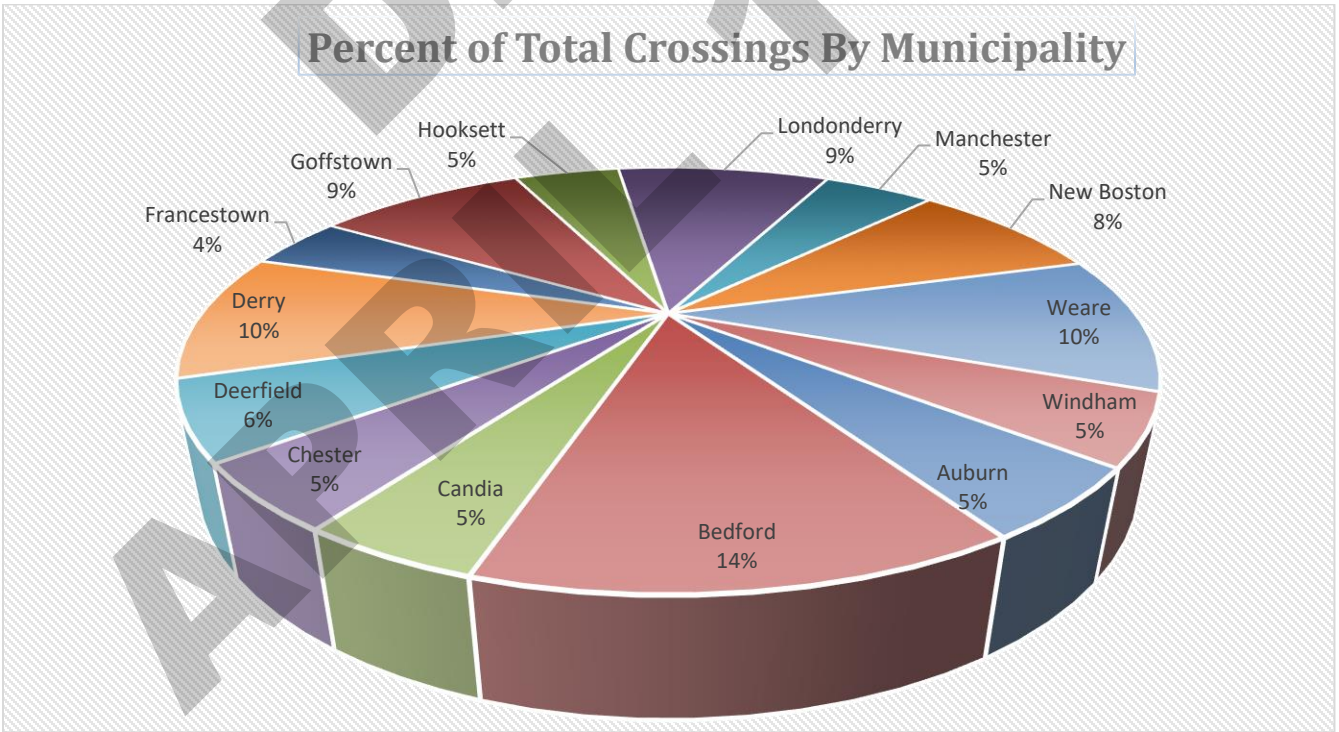
ID'd	101
Not ID'd	1487
TOTAL:	1588

Crossing Count By Town

Municipality	Count
Auburn	81
Bedford	216
Candia	73
Chester	76
Deerfield	93
Derry	155
Francestown	66
Goffstown	145
Hooksett	74
Londonderry	150
Manchester	77
New Boston	133
Weare	166
Windham	83
TOTAL:	1,588

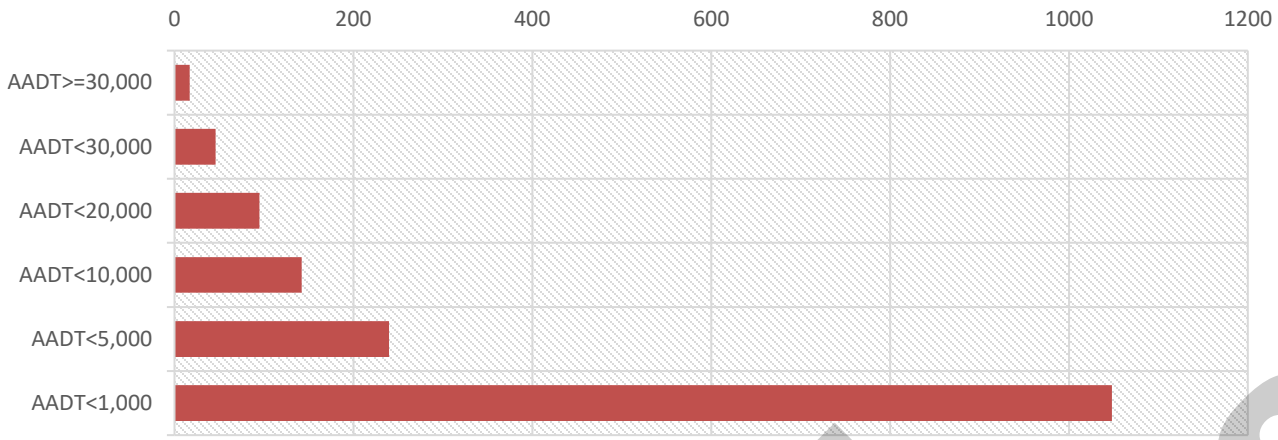
Beaver Activity

Yes	90
No	1498
TOTAL:	1588

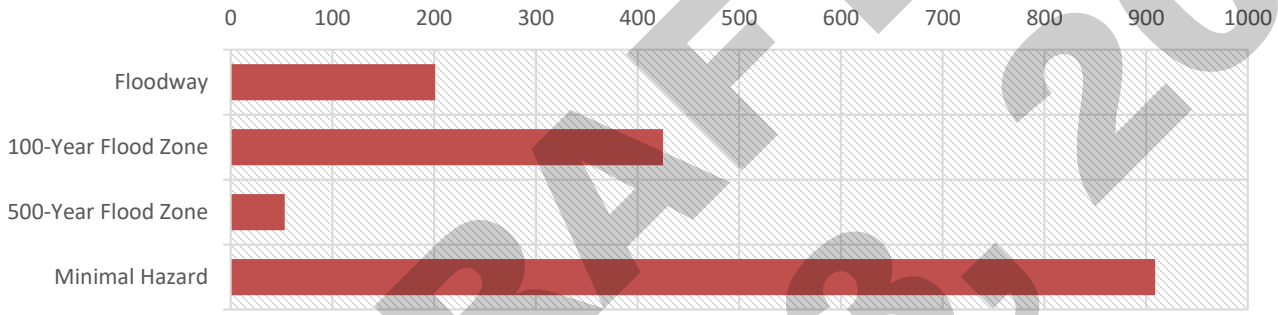


DRAFT APRIL 13, 2020

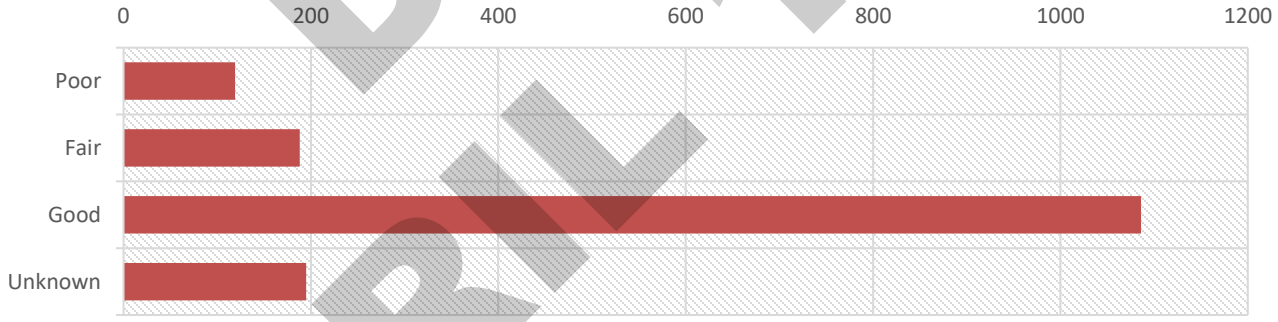
Total Region Count by Traffic Vol. Category



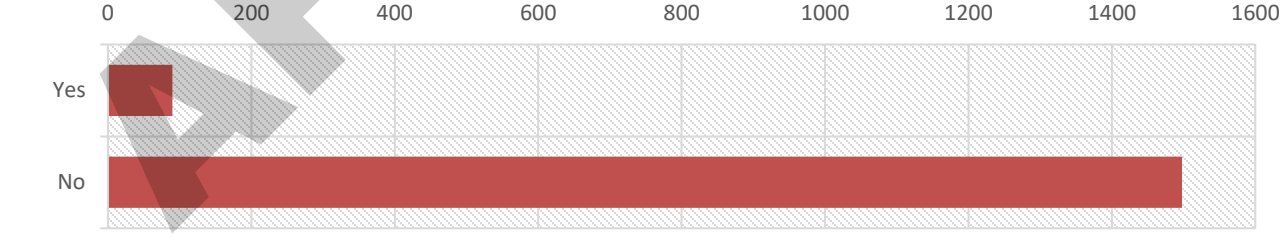
Total Region Count by Flood Zone Categorey



Total Region Count by Condition

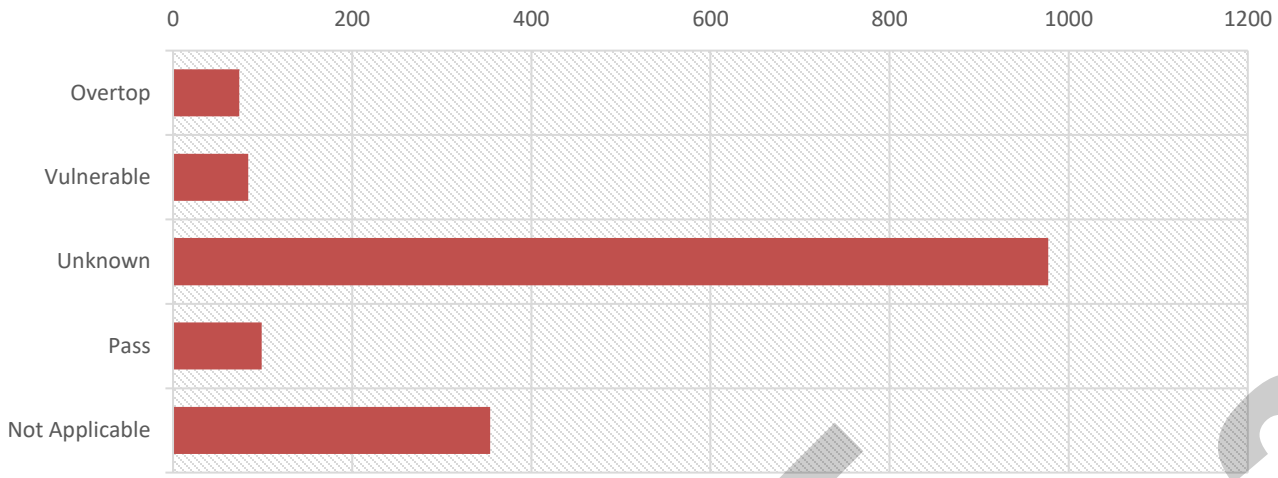


Total Region Count by Beaver Activity

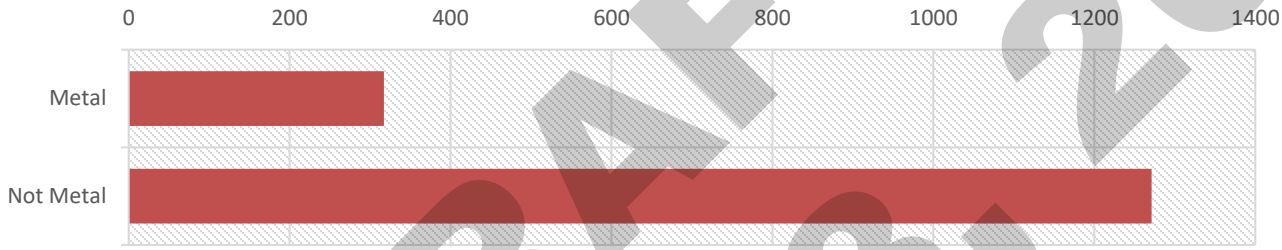


DRAFT APRIL 13, 2020

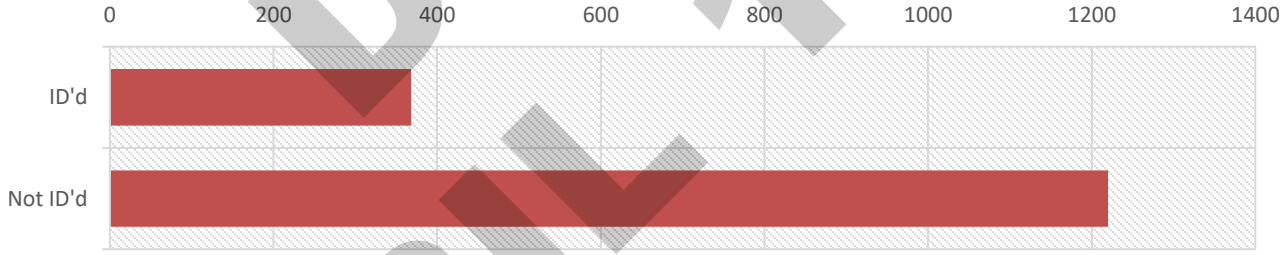
Total Region Count by 10-Yr Vulnerability



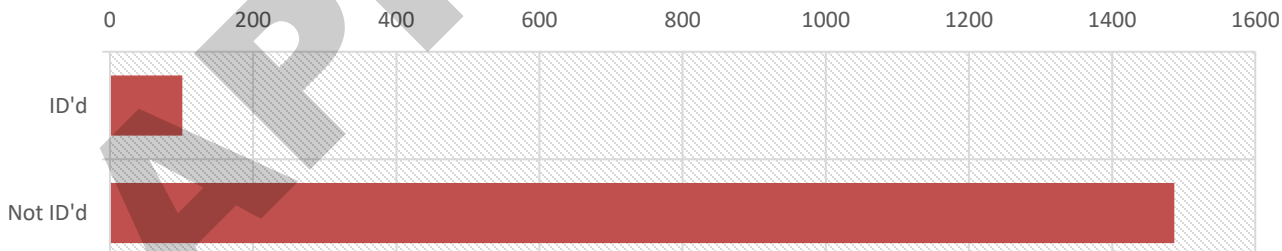
Total Region Count by Crossing Material



Total Region Count by ID'd Flood Hazard History



Total Region Count by Asset Manager ID



DRAFT
APRIL 13, 2020

Prioritization Results: Town of Auburn

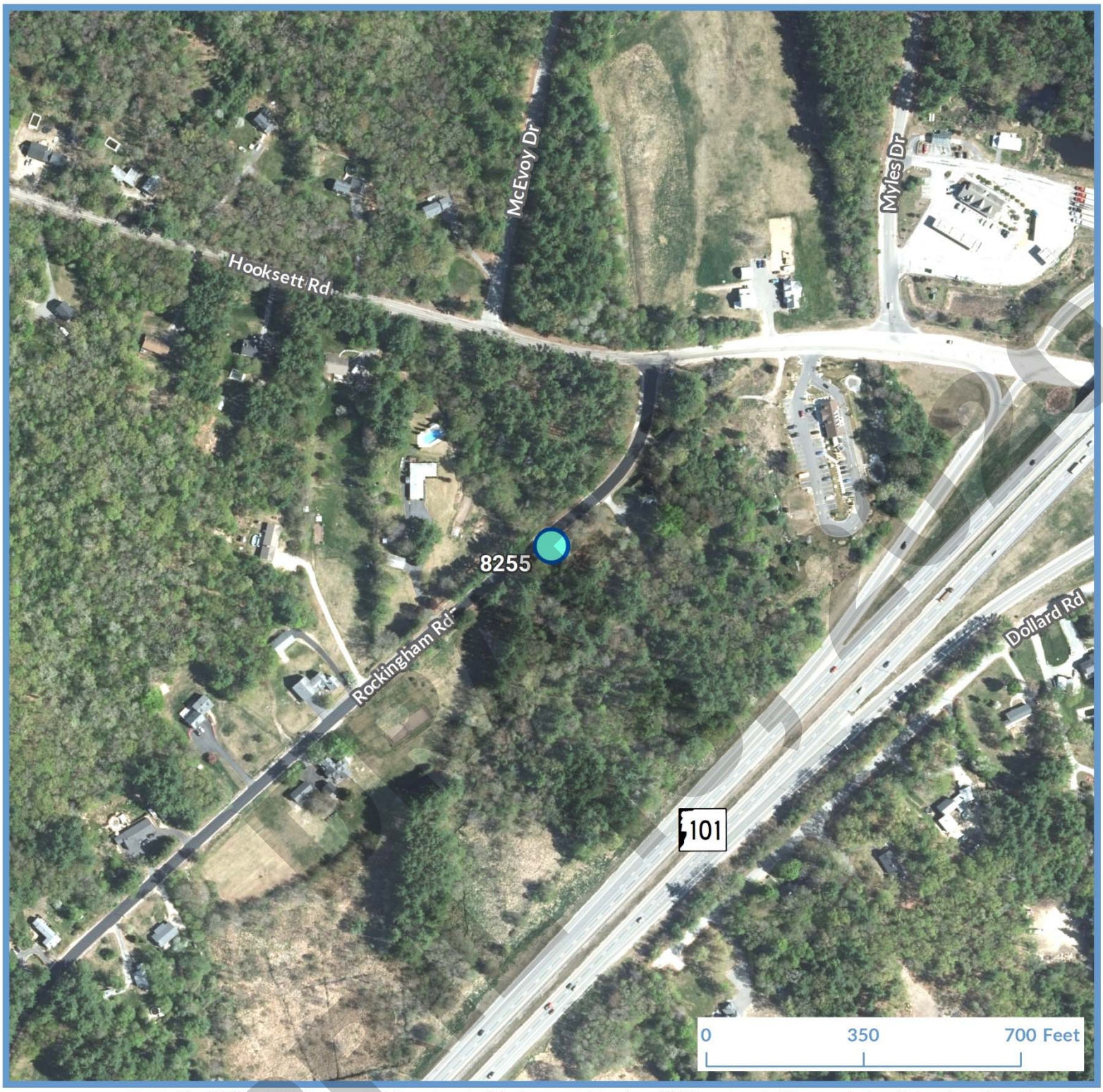
SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
8255	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	28
8637	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	25
195	AADT<5,000	2	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	24
8257	AADT<30,000	8	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	21
2714	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	18
8254	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	18
9063	AADT<30,000	8	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Not Applicable	0	Not Metal	0	No	0	17
9390	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	17
8631	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	17
9333	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
9332	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
9331	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
8526	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
8261	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	16
8259	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	16
2715	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	16
8633	AADT<5,000	2	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	15
9060	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	15
9059	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	15
9058	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
9056	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	15
7248	AADT<10,000	4	Yes	10	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	14
8462	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Metal	2	No	0	14
8262	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Metal	2	Yes	2	14
9334	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	13
9067	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	13
9066	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	13
9065	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	13
9064	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	13
8260	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	13
999860	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	13
9688	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	13
9389	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	13
9388	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	13
9077	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	13
9068	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
9019	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	13
8528	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	13
999883	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999888	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
8634	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	11
999901	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
999856	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
8636	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	10

DRAFT 1/8/2020

Prioritization Results: Town of Auburn

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
8256	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	10
14945	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	10
9055	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	10
8465	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	10
7249	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Pass	0	Not Metal	0	No	0	9
8742	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Not Applicable	0	Not Metal	0	No	0	9
8741	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Not Applicable	0	Not Metal	0	No	0	9
8337	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	9
999993	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999967	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999854	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
9074	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
9061	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
8335	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
9062	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
8369	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
9021	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
9020	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
8527	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
8370	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
8368	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
9073	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	5
9022	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
8632	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	5
9069	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9057	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9018	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
8635	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
8464	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
8371	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
8336	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
8334	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
8460	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
2713	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
474	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
8463	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
8461	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0

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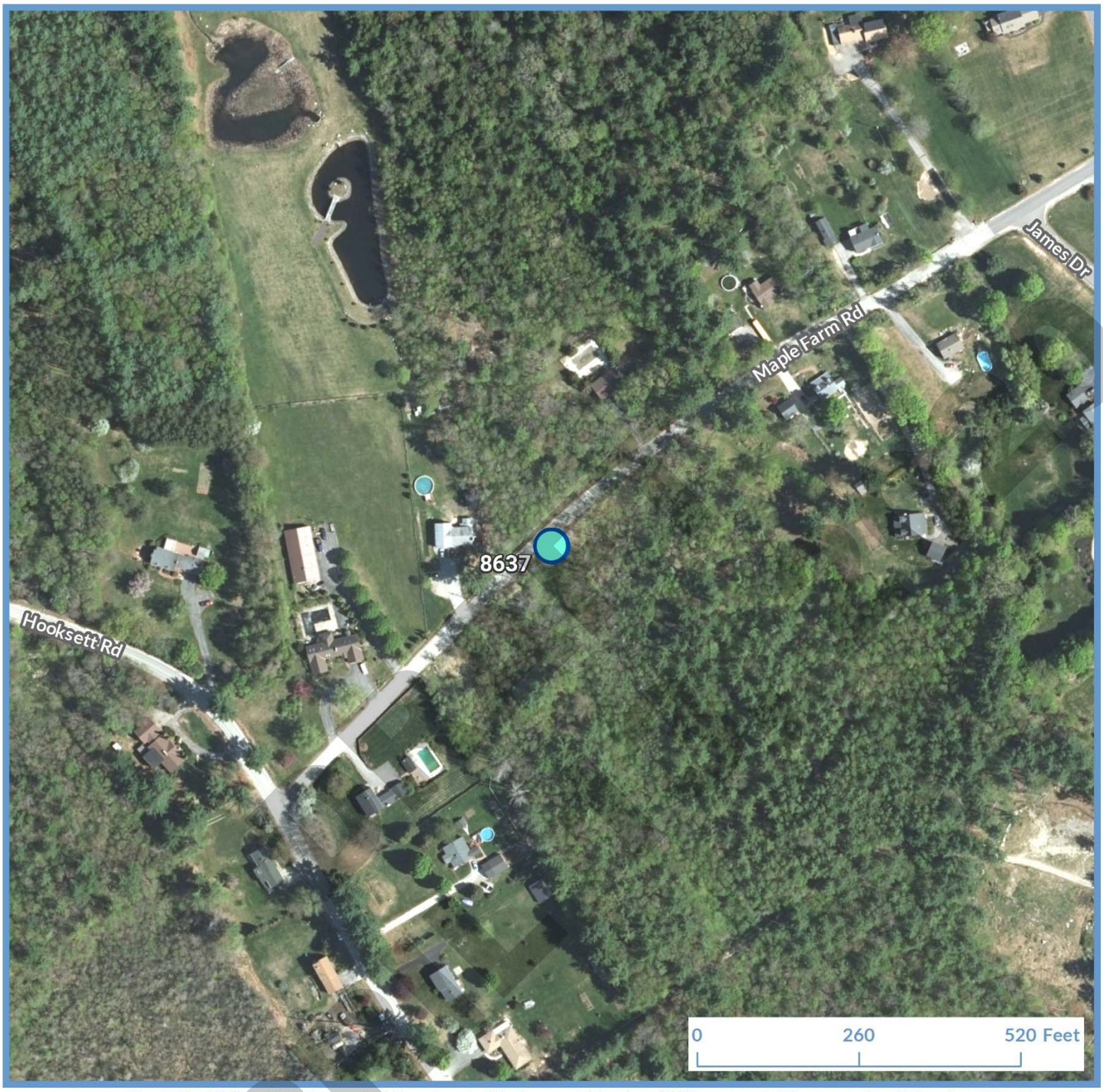
Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

APPROVED

Auburn, NH		Stream Crossing Detail Sheet			SADES ID 8255
Prioritization Score	**28**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**Rockingham Rd**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**N/A**
		Flood Zone Category	**Minimal Hazard**	**Structure Type**	**Concrete Round Culvert**
		Culvert Condition	**Poor**	**Crossing Width**	**3.00'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**3.00'**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**07/05/2017**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Auburn, NH		Stream Crossing Detail Sheet			SADES ID 8637
Prioritization Score	**25**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**Maple Farm Rd**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**N/A**
		Flood Zone Category	**Minimal Hazard**	**Structure Type**	**Aluminum Corrg Round Culvert**
		Culvert Condition	**Fair**	**Crossing Width**	**1.25'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**Unknown**
		Crossing Material	**Metal**	**Obstruction**	**Deformation of Culvert**
		Beaver Activity	**No**	**Assessment Date**	**07/17/2017**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020

APPROVED



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

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APRIL 13

Auburn, NH		Stream Crossing Detail Sheet			SADES ID 195
Prioritization Score	**24**	**Traffic Volume**	**<5,000**	**Crossing Type**	**Surface**
		Asset Manager ID'd	**Yes**	**Road Name**	**Manchester Rd**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Name**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Embedded Concrete Elliptical**
		Culvert Condition	**Good**	**Crossing Width**	**8.00'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**8.00'**
		Crossing Material	**Non-Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**07/28/2014**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020

Prioritization Score Statistical Summary: Town of Auburn

Traffic Volumes

Count	Totals
AADT>=30,000	0
AADT<30,000	12
AADT<20,000	0
AADT<10,000	8
AADT<5,000	15
AADT<1,000	46
TOTAL:	81

10-Yr Vulnerability

Category	Count
Overtop	0
Vulnerable	1
Unknown	56
Pass	2
Not Applicable	22
TOTAL:	81

Beaver Activity

Yes	1
No	80
TOTAL:	81

Total Crossings

Region	1588
Town	81

Flood Zone

Count	Totals
Floodway	0
100-Year Flood Zone	15
500-Year Flood Zone	0
Minimal Hazard	66
TOTAL:	81

Structure Material

Metal	8
Not Metal	73
TOTAL:	81

Flood Hazard

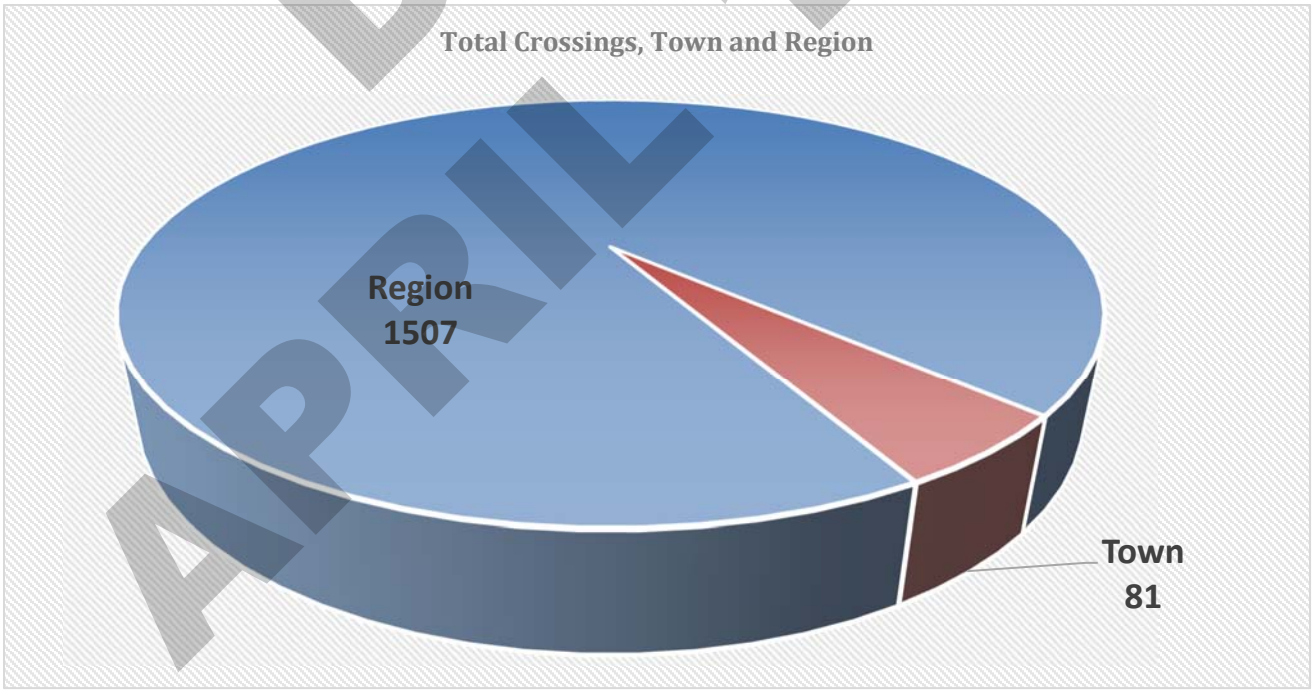
ID'd	25
Not ID'd	56
TOTAL:	81

Culvert Condition

Poor	4
Fair	8
Good	40
Unknown	29
TOTAL:	81

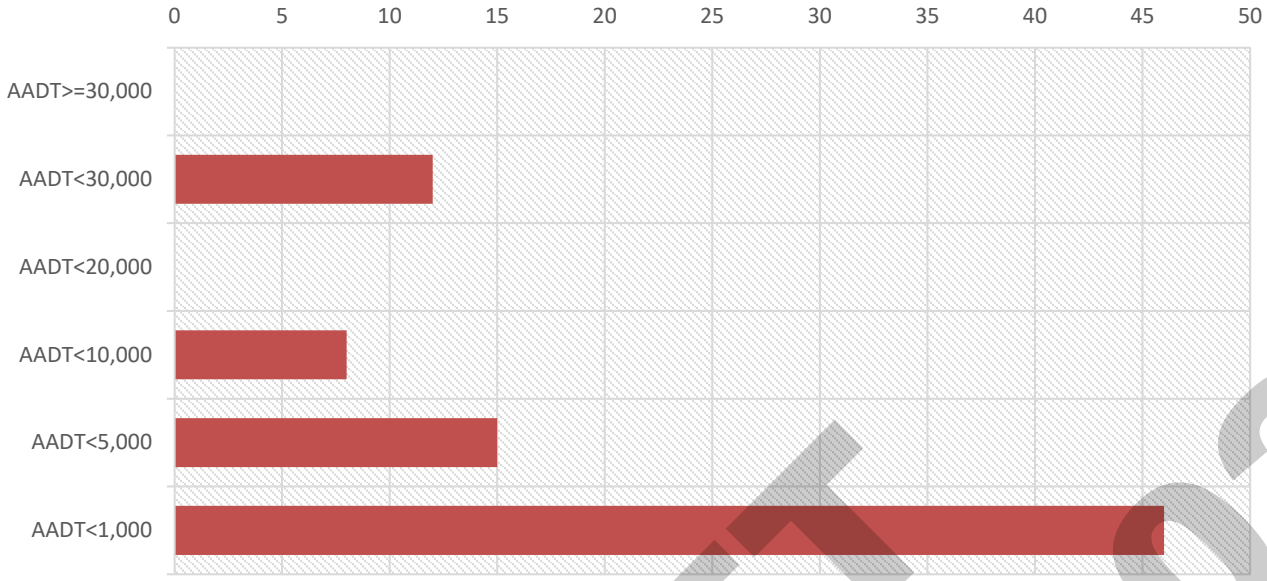
Asset Manager

ID'd	11
Not ID'd	70
TOTAL:	81

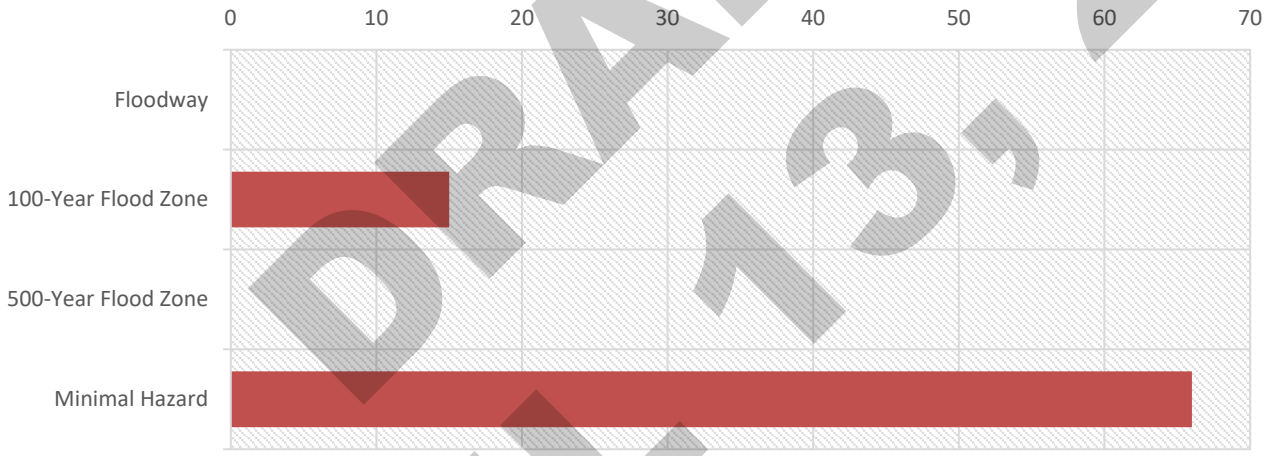


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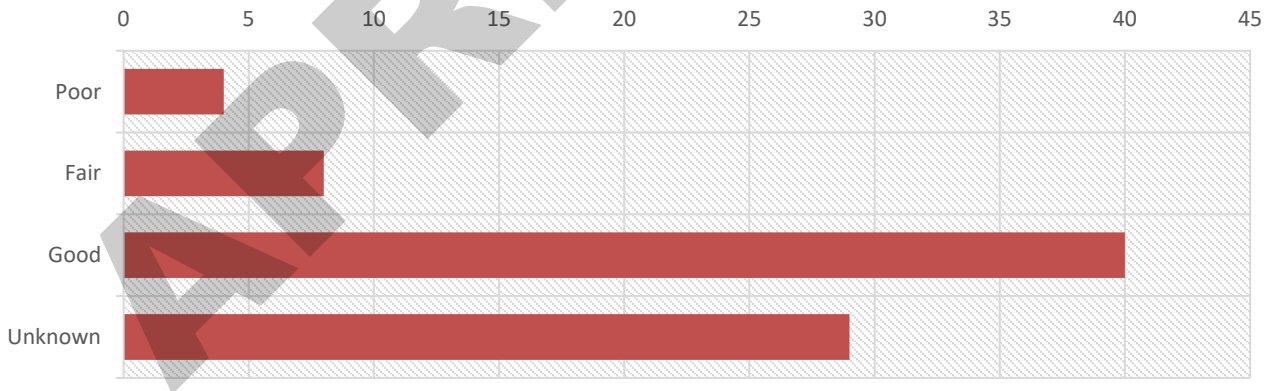
Muni. Count by Traffic Volume Category



Muni. Count by FEMA Flood Zone Categorey

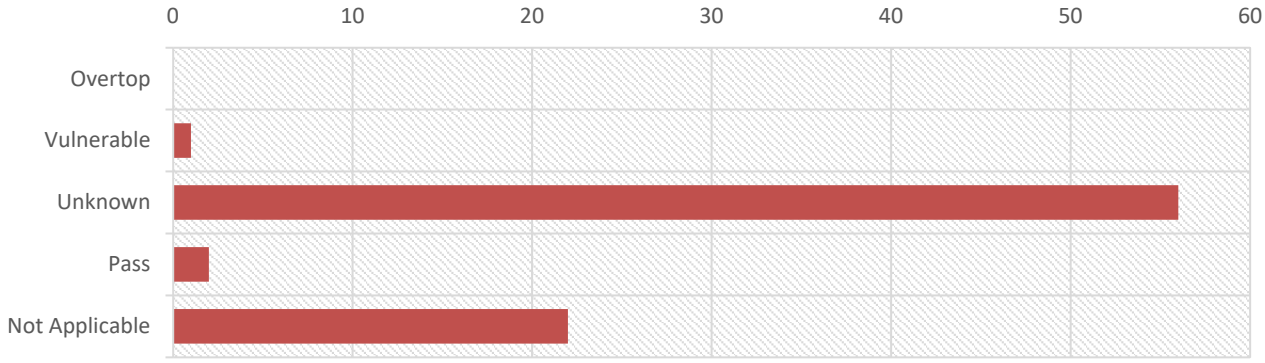


Muni. Count by Stream Crossing Condition

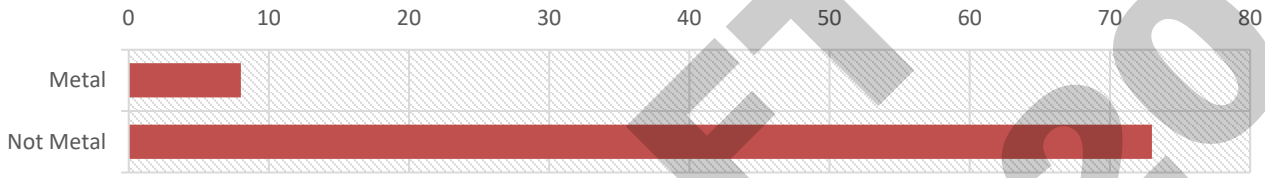


DRAFT APRIL 13, 2020

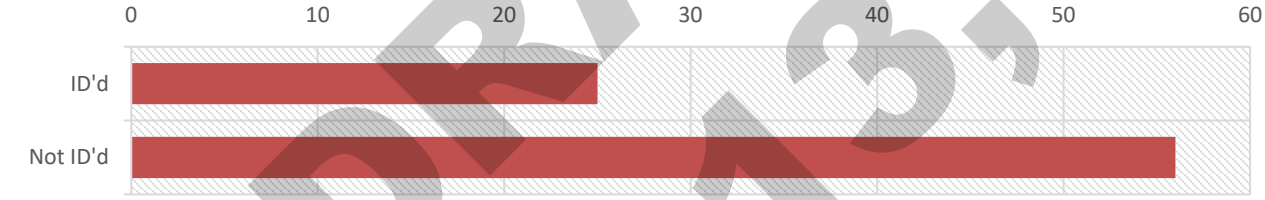
Muni. Count by 10-Yr Vulnerability



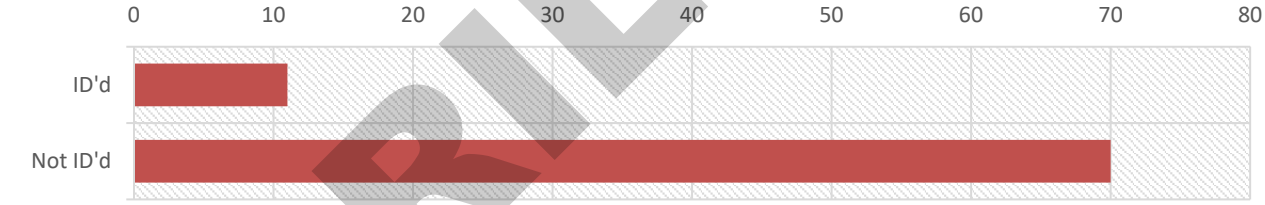
Muni. Count By Structure Material



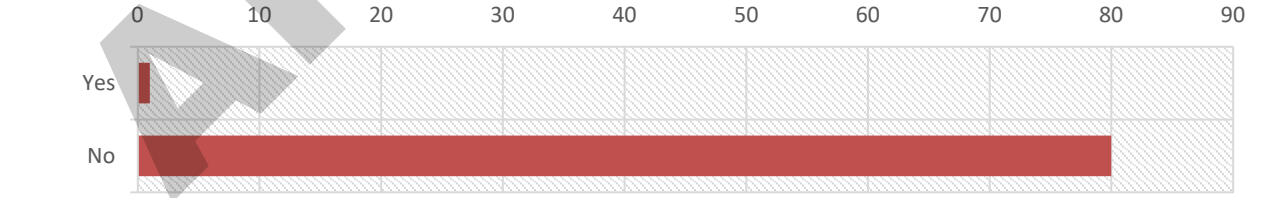
Muni. Count by Identified Flood Hazard History



Muni. Count by Asset Manager Identification



Total Region Count by Beaver Activity



DRAFT APRIL 13, 2020

Prioritization Results: Town of Bedford

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
9011	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	27
5053	AADT<1,000	0	Yes	10	Yes	5	Floodway	5	Good	0	Overtop	5	Metal	2	No	0	27
192	AADT<20,000	6	No	0	Yes	5	Floodway	5	Poor	10	Not Applicable	0	Not Metal	0	No	0	26
191	AADT<30,000	8	No	0	No	0	Floodway	5	Poor	10	Pass	0	Metal	2	No	0	25
9126	AADT<10,000	4	No	0	No	0	Floodway	5	Poor	10	Unknown	3	Metal	2	No	0	24
9053	AADT>=30,000	10	No	0	No	0	Floodway	5	Fair	5	Unknown	3	Not Metal	0	No	0	23
9119	AADT<20,000	6	No	0	No	0	Floodway	5	Poor	10	Not Applicable	0	Metal	2	No	0	23
5114	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Vulnerable	4	Not Metal	0	No	0	23
9116	AADT<30,000	8	No	0	Yes	5	Floodway	5	Good	0	Vulnerable	4	Not Metal	0	No	0	22
999894	AADT<30,000	8	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	21
9125	AADT<30,000	8	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	21
9051	AADT<30,000	8	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	21
4251	AADT<1,000	0	Yes	10	No	0	Floodway	5	Good	0	Vulnerable	4	Metal	2	No	0	21
193	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Metal	2	No	0	20
5100	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Poor	10	Vulnerable	4	Metal	2	No	0	20
9141	AADT<30,000	8	No	0	No	0	500-Year Flood Zone	3	Fair	5	Unknown	3	Not Metal	0	No	0	19
999966	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
5121	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Vulnerable	4	Not Metal	0	No	0	18
5201	AADT>=30,000	10	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Not Metal	0	No	0	16
999995	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
15382	AADT<30,000	8	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	16
15381	AADT<20,000	6	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	Yes	2	16
6877	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Overtop	5	Metal	2	No	0	16
5096	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Vulnerable	4	Metal	2	No	0	16
2873	AADT<30,000	8	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	15
9146	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
9127	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	Yes	2	15
5105	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	15
9140	AADT<30,000	8	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Not Metal	0	No	0	14
2804	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	14
4838	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Vulnerable	4	Not Metal	0	No	0	14
2874	AADT<20,000	6	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Metal	2	No	0	13
9118	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Vulnerable	4	Not Metal	0	No	0	13
5203	AADT<1,000	0	No	0	Yes	5	500-Year Flood Zone	3	Good	0	Unknown	3	Metal	2	No	0	13
5200	AADT<1,000	0	No	0	Yes	5	500-Year Flood Zone	3	Good	0	Unknown	3	Metal	2	No	0	13
5118	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
4926	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	13
999906	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999904	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999885	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
9142	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
5041	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	12
9124	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	11
2803	AADT<20,000	6	No	0	No	0	Floodway	5	Good	0	Pass	0	Not Metal	0	No	0	11

DRAFT 8/18/2020

Prioritization Results: Town of Bedford

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
2802	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	11
4254	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Vulnerable	4	Not Metal	0	No	0	11
999875	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
1378	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	10
1348	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	10
9114	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Overtop	5	Not Metal	0	No	0	10
6878	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Overtop	5	Not Metal	0	No	0	10
5054	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	10
5043	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Metal	2	No	0	10
4992	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Overtop	5	Not Metal	0	No	0	10
4988	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Metal	2	No	0	10
4896	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	10
4252	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Overtop	5	Not Metal	0	No	0	10
2800	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
5101	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	9
2801	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	9
4840	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	9
9115	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	9
9015	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	9
8984	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Vulnerable	4	Not Metal	0	No	0	9
5125	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	9
5115	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	9
5061	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	9
5059	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Vulnerable	4	Not Metal	0	No	0	9
5058	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	9
5056	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	9
5047	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Metal	2	Yes	2	9
4987	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	9
4853	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	9
4259	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Vulnerable	4	Not Metal	0	No	0	9
4258	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Vulnerable	4	Not Metal	0	No	0	9
4257	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Vulnerable	4	Not Metal	0	No	0	9
9117	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	8
999867	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
9147	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
9123	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
9052	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	8
9050	AADT<1,000	0	No	0	Yes	5	500-Year Flood Zone	3	Good	0	Pass	0	Not Metal	0	No	0	8
9010	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
9009	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
8983	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
6876	AADT<1,000	0	No	0	No	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
5297	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	8
5055	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	8

DRAFT 1/15/2020

Prioritization Results: Town of Bedford

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
2848	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
6875	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	7
5296	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	7
5295	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	7
5084	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
5071	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
5057	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	7
5049	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	7
5048	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	7
4995	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
4927	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	7
4906	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	7
4890	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Vulnerable	4	Not Metal	0	No	0	7
4852	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	7
4236	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	7
1349	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
194	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	Yes	2	6
9122	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	6
5104	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	6
4889	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	6
4905	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Metal	2	No	0	6
4866	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Metal	2	No	0	6
4235	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Metal	2	No	0	6
4939	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
9149	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
9143	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	5
6879	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Pass	0	Not Metal	0	No	0	5
5126	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	5
5113	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5109	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5108	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5106	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5103	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	5
5102	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	5
5095	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5089	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5083	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
5070	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	5
5063	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5062	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5060	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	5
5046	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	5
5044	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5034	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5

DRAFT

Prioritization Results: Town of Bedford

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
5033	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
5020	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4991	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4990	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4989	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4938	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4839	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4250	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Pass	0	Not Metal	0	No	0	5
4245	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4239	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Pass	0	Not Metal	0	No	0	5
4943	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	4
2847	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	4
9016	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
5131	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5130	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5119	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5117	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5116	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5110	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5088	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5087	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5085	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
5019	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
4994	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	4
4945	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
4895	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
4253	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
4244	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
4240	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
4237	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
9442	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9121	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5298	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Pass	0	Not Metal	0	No	0	3
5120	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5032	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4944	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4892	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4891	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4854	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Pass	0	Not Metal	0	No	0	3
4841	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4256	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4249	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4246	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4238	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3

DRAFT 1/8/2020

Prioritization Results: Town of Bedford

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
989	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
988	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6880	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
5133	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	Yes	2	2
4855	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Metal	2	No	0	2
9017	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
6874	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5135	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5132	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5129	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5128	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5112	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5111	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5107	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5099	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5098	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5097	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5086	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5082	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5045	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5042	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5031	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5026	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5004	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4993	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4948	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4947	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4946	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4937	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4936	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4857	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4856	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4851	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4260	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4255	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
4248	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
4247	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
4243	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
4242	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
4241	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0

DRAFT 1-31-2020



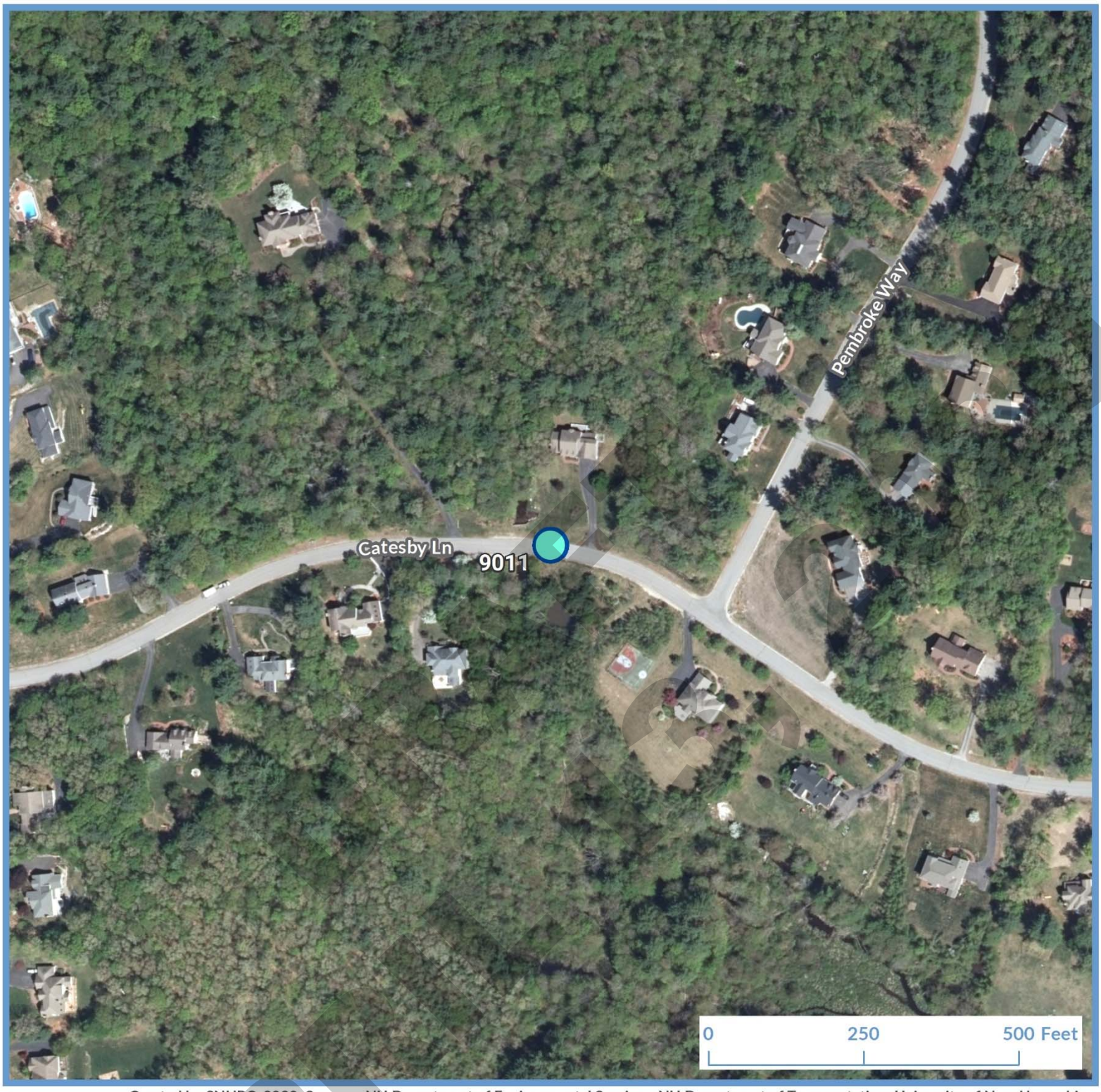
Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Bedford, NH		Stream Crossing Detail Sheet			SADES ID 5053
Prioritization Score	**27**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**Meadow Rd**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Riddle Brook**
		Flood Zone Category	**Floodway**	**Structure Type**	**Round Steel Corrugated**
		Culvert Condition	**Good**	**Crossing Width**	**4.00'**
		10-Yr Hydraulic Vuln.	**Overtop**	**Open Height**	**4.00'**
		Crossing Material	**Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**06/29/2015**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020

APPROVED



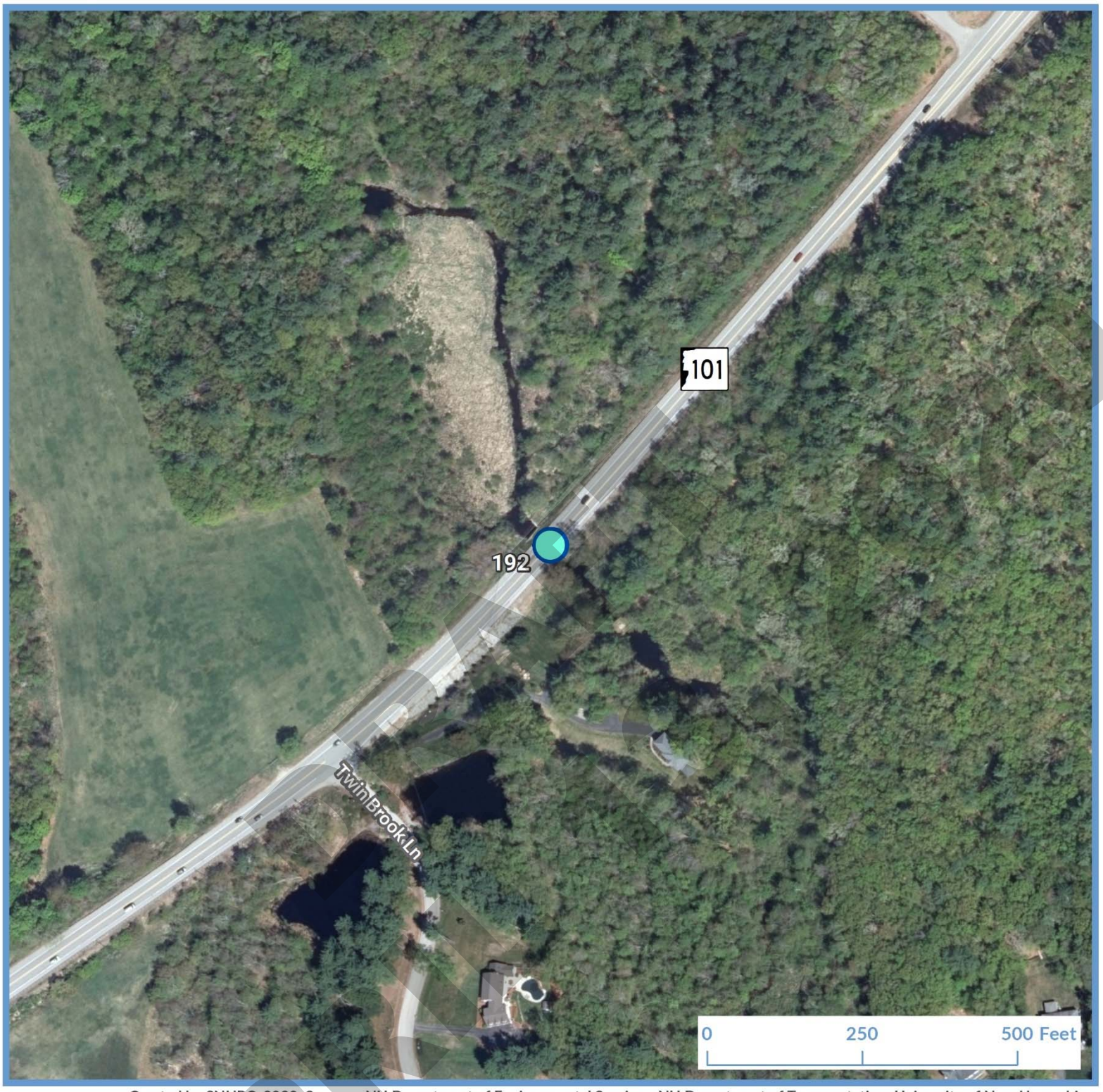
Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Bedford, NH		Stream Crossing Detail Sheet			SADES ID 9011
Prioritization Score	**27**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Not Surveyed**
		Asset Manager ID'd	**Yes**	**Road Name**	**Catesby Lane**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Name**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Plastic Elliptical Culvert**
		Culvert Condition	**Fair**	**Crossing Width**	**No Data**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**08/01/2017**

SNHPC

Detail Sheet Created: January 17, 2020

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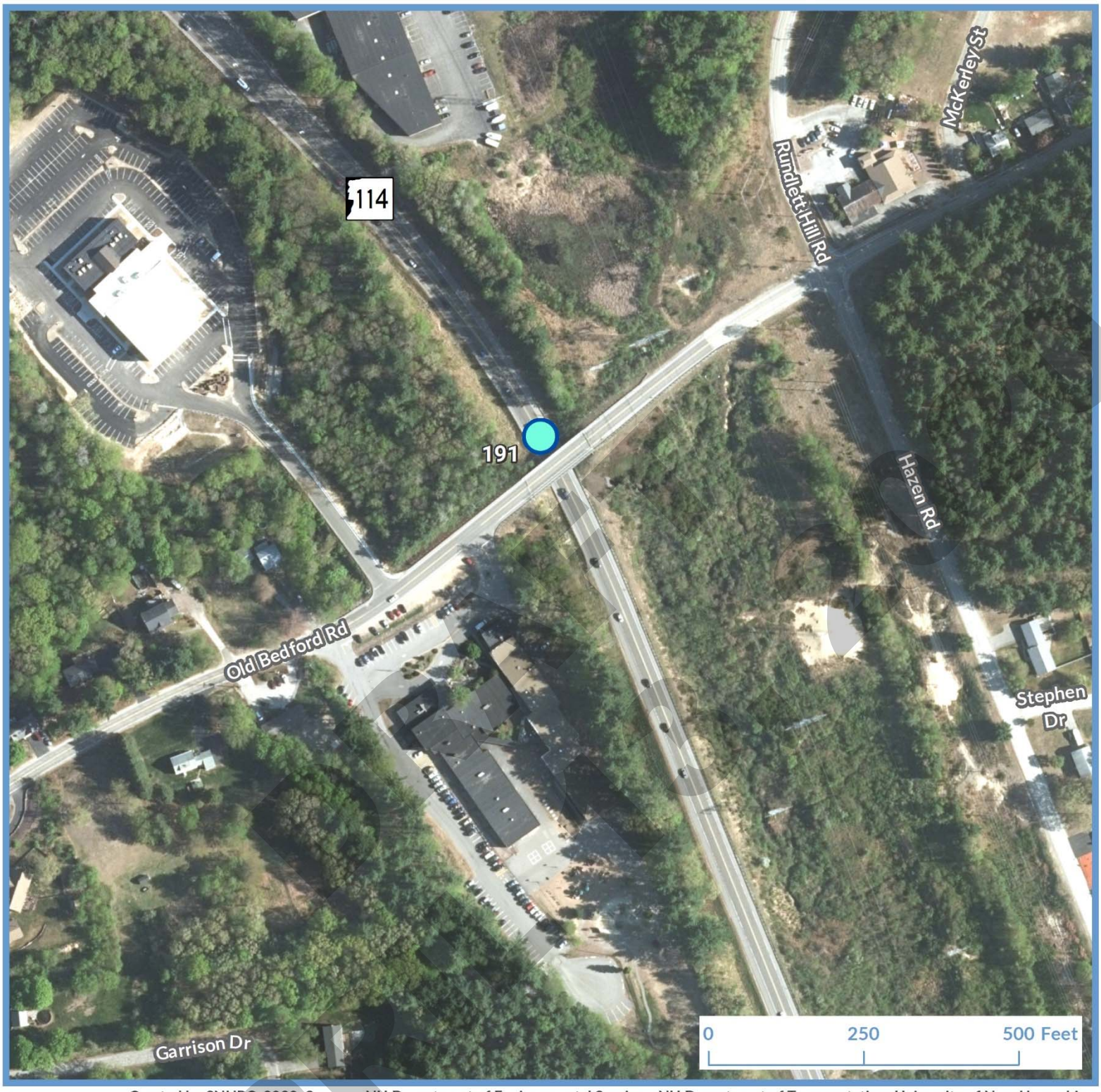
Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Bedford, NH		Stream Crossing Detail Sheet			SADES ID 192
Prioritization Score	**26**	**Traffic Volume**	**<20,000**	**Crossing Type**	**Wetland**
		Asset Manager ID'd	**No**	**Road Name**	**Route 101**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Pulpit Brook**
		Flood Zone Category	**Floodway**	**Structure Type**	**Concrete Round Culvert**
		Culvert Condition	**Poor**	**Crossing Width**	**4.00'**
		10-Yr Hydraulic Vuln.	**Not Applicable**	**Open Height**	**4.00'**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**07/31/2014**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
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Detail Sheet Created: January 17, 2020

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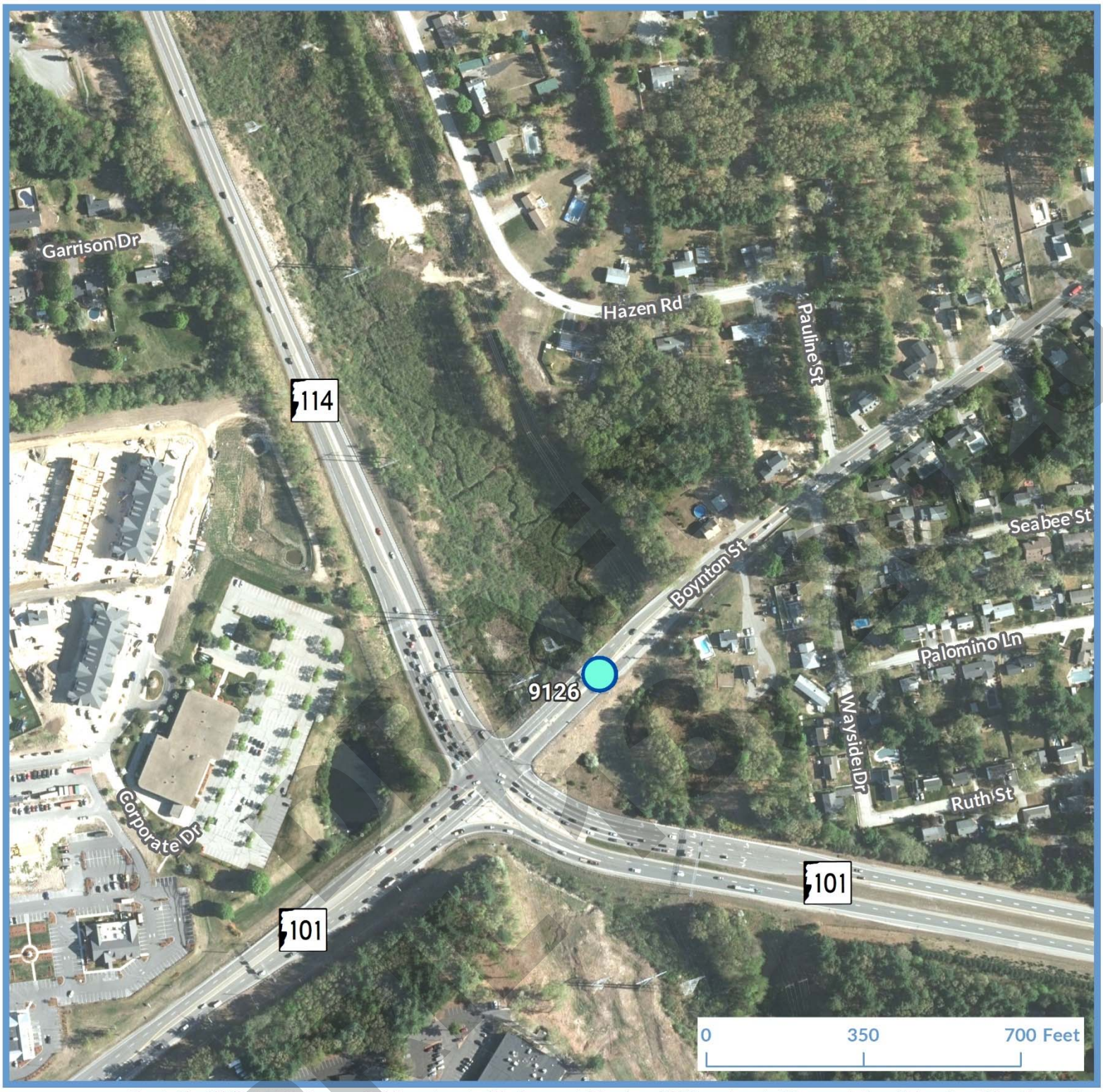
Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Bedford, NH		Stream Crossing Detail Sheet			SADES ID 191
Prioritization Score	**25**	**Traffic Volume**	**<30,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**No**	**Road Name**	**Route 114**
		Flood Hazard ID'd	**No**	**Stream Name**	**Bowman Brook**
		Flood Zone Category	**Floodway**	**Structure Type**	**Steel Corrugated Round Culvert**
		Culvert Condition	**Poor**	**Crossing Width**	**7.50'**
		10-Yr Hydraulic Vuln.	**Pass**	**Open Height**	**7.50'**
		Crossing Material	**Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**06/19/2018**

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Detail Sheet Created: January 17, 2020

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Bedford, NH		Stream Crossing Detail Sheet			SADES ID 9126
Prioritization Score	**24**	**Traffic Volume**	**<10,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**No**	**Road Name**	**Boynton Street**
		Flood Hazard ID'd	**No**	**Stream Name**	**No Name**
		Flood Zone Category	**Floodway**	**Structure Type**	**Steel Corrugated Round Culvert**
		Culvert Condition	**Poor**	**Crossing Width**	**7.10'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**7.10'**
		Crossing Material	**Metal**	**Obstruction**	**Deformation of Culvert**
		Beaver Activity	**No**	**Assessment Date**	**08/03/2017**

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Prioritization Score Statistical Summary: Town of Bedford

Traffic Volumes

Count	Totals
AADT>=30,000	3
AADT<30,000	12
AADT<20,000	7
AADT<10,000	15
AADT<5,000	10
AADT<1,000	169
TOTAL:	216

10-Yr Vulnerability

Category	Count
Overtop	39
Vulnerable	41
Unknown	61
Pass	52
Not Applicable	23
TOTAL:	216

Beaver Activity

Yes	9
No	207
TOTAL:	216

Total Crossings

Region	1372
Town	216

Flood Zone

Count	Totals
Floodway	40
100-Year Flood Zone	28
500-Year Flood Zone	9
Minimal Hazard	139
TOTAL:	216

Structure Material

Metal	31
Not Metal	185
TOTAL:	216

Flood Hazard

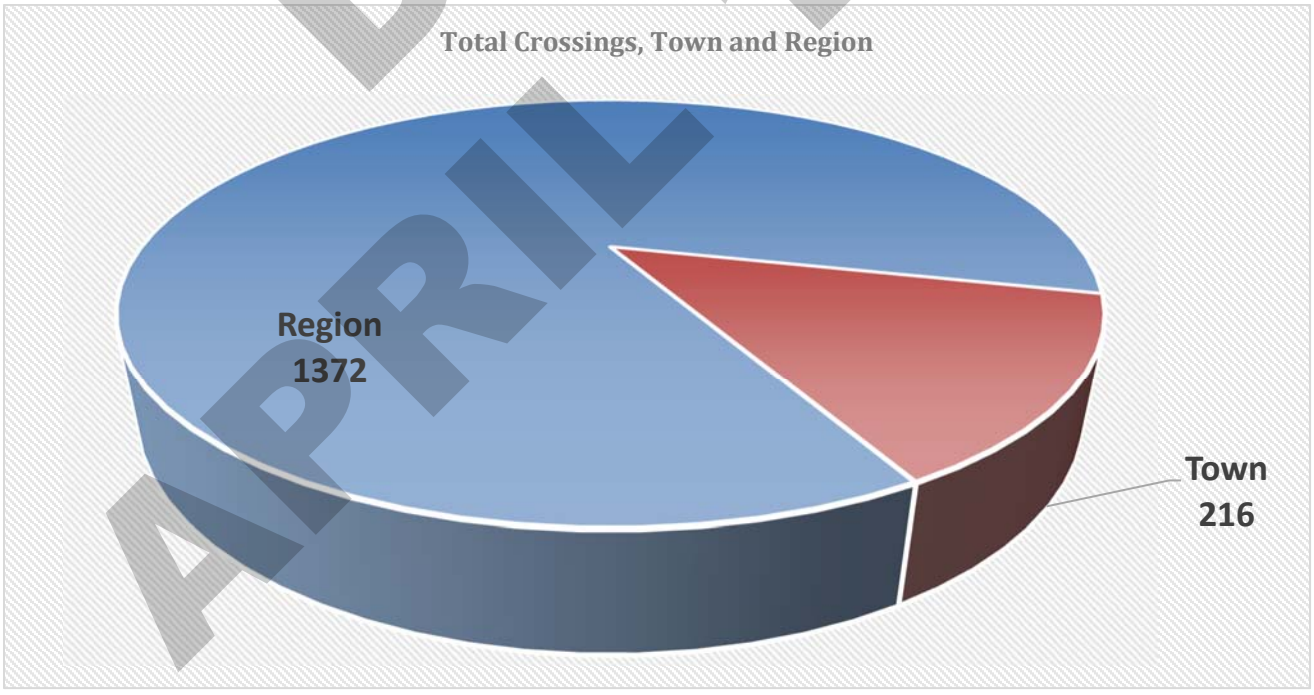
ID'd	23
Not ID'd	193
TOTAL:	216

Culvert Condition

Poor	12
Fair	9
Good	183
Unknown	12
TOTAL:	216

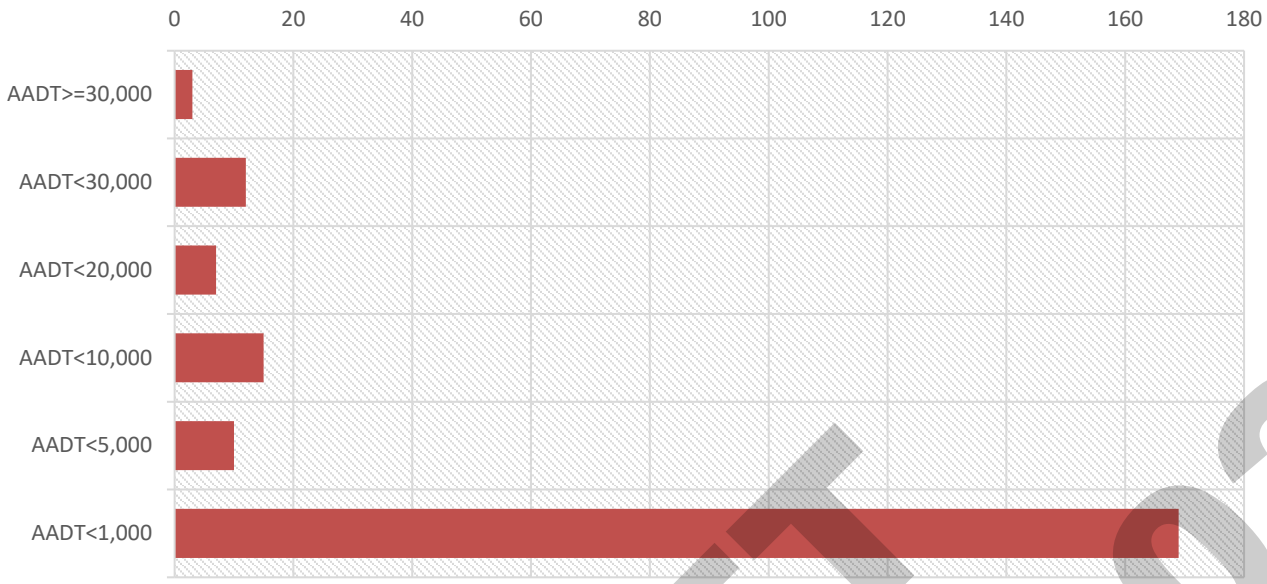
Asset Manager

ID'd	5
Not ID'd	211
TOTAL:	216

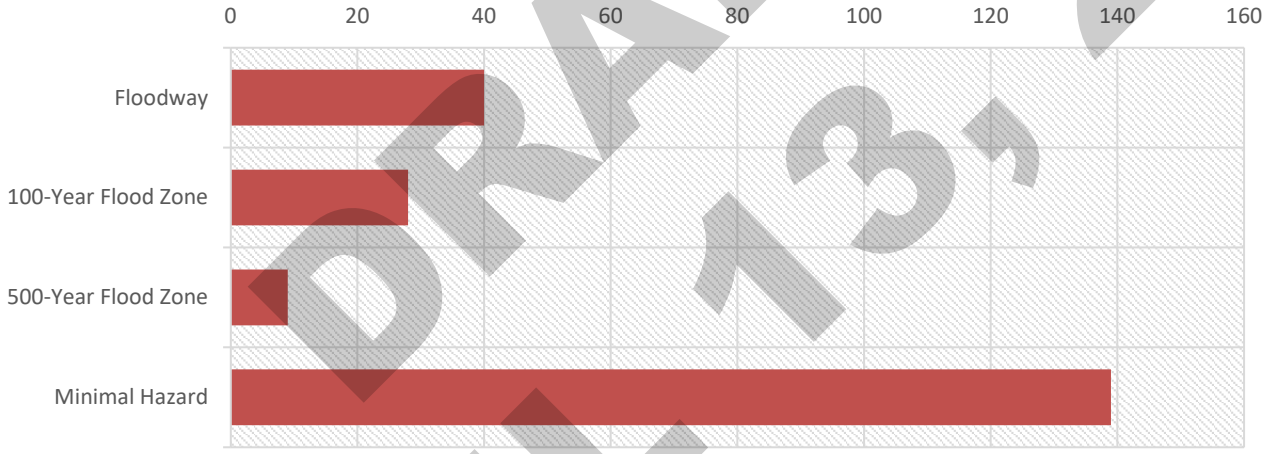


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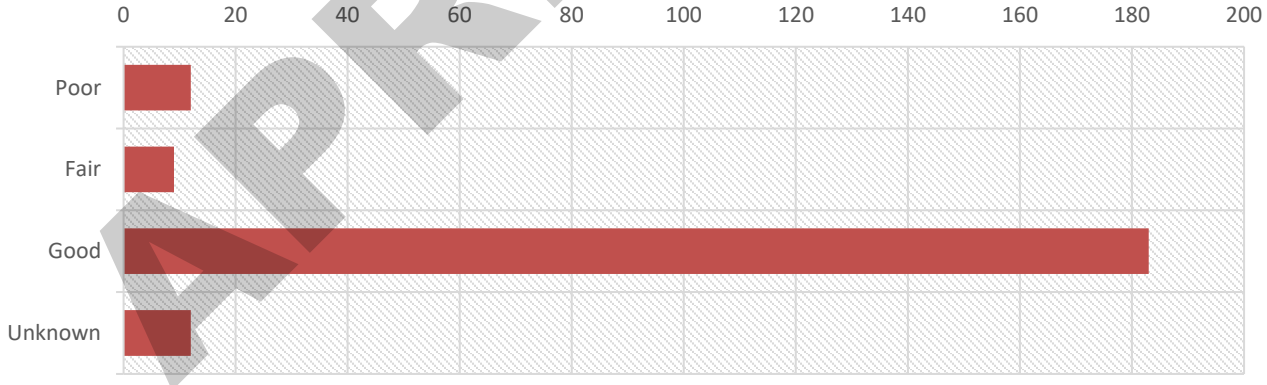
Muni. Count by Traffic Volume Category



Muni. Count by FEMA Flood Zone Categorey

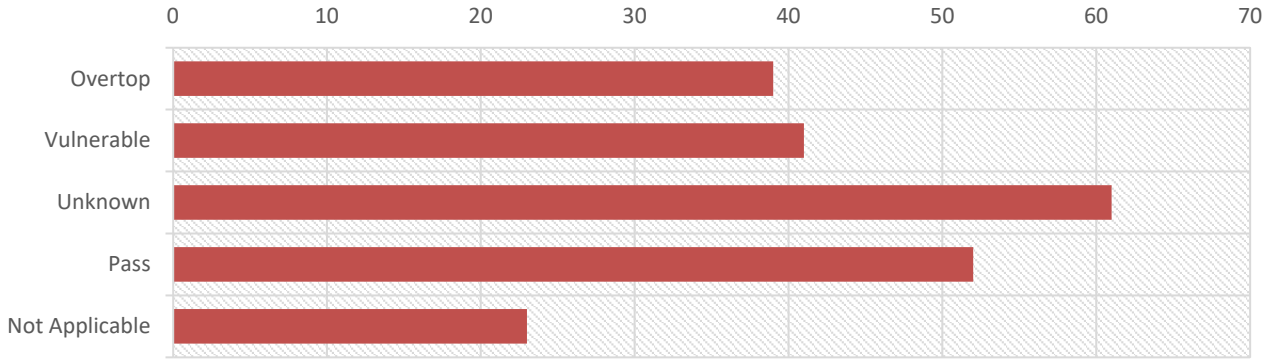


Muni. Count by Stream Crossing Condition

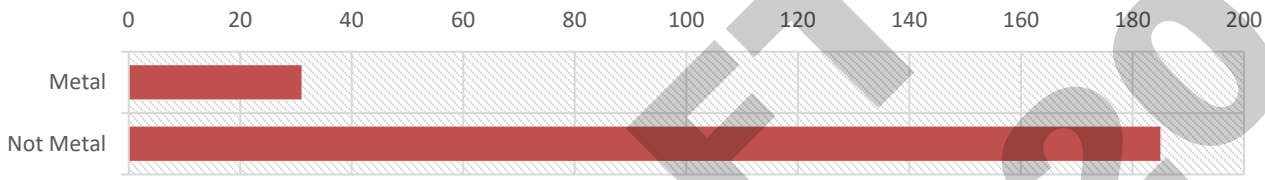


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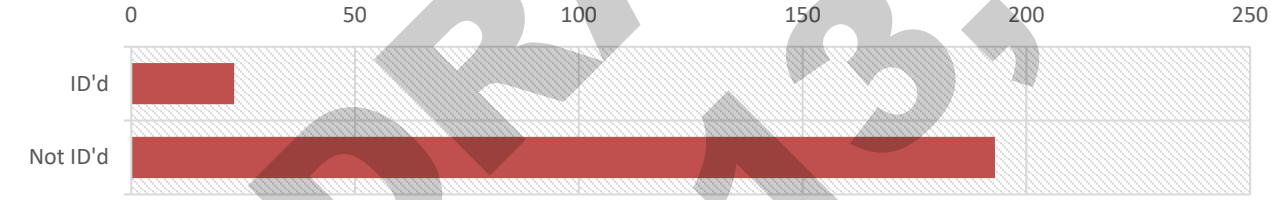
Muni. Count by 10-Yr Vulnerability



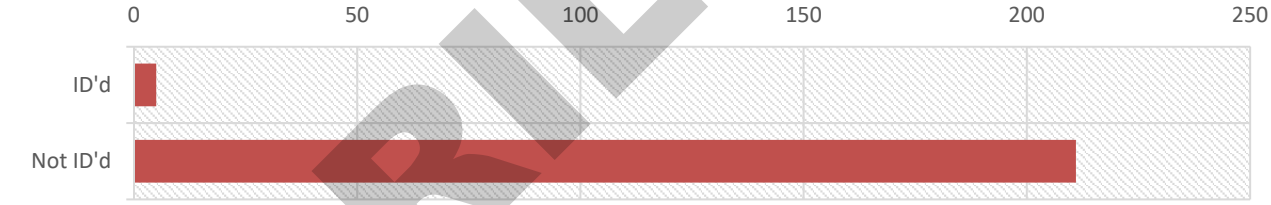
Muni. Count By Structure Material



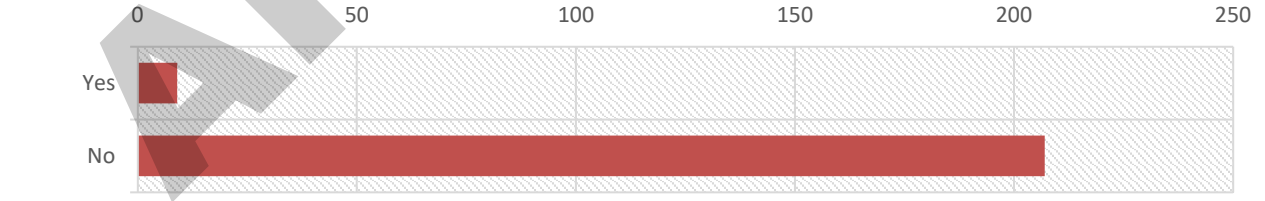
Muni. Count by Identified Flood Hazard History



Muni. Count by Asset Manager Identification



Total Region Count by Beaver Activity



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Prioritization Results: Town of Candia

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
196	AADT<30,000	8	Yes	10	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Metal	2	No	0	29
5464	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	29
197	AADT<30,000	8	Yes	10	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Metal	2	No	0	25
14741	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	No	0	24
999910	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	22
5471	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Not Metal	0	Yes	2	21
5622	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	21
14742	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	19
6275	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	No	0	19
5441	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	18
999909	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
5621	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	18
8258	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	17
6531	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Not Metal	0	No	0	17
6276	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Not Metal	0	No	0	17
999994	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
5469	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	16
6535	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	16
5472	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	16
14740	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	16
5843	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
6277	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	14
2781	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	13
1130	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	13
7883	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	13
5463	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	13
5511	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Not Metal	0	No	0	12
8034	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
8023	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
8022	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
8021	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
8020	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
5442	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
2719	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	11
5470	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	11
999907	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
5440	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	10
5418	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	10
5416	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	10
6532	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
1131	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
5443	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
5414	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	9
1129	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9

DRAFT REPORT

Prioritization Results: Town of Candia

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
999908	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
8019	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
8018	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
8017	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
8001	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
6533	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
5415	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
2861	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	7
3198	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
5474	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	6
5473	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	6
5417	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
2860	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
2749	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
5841	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
6534	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6274	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5842	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5840	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5465	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5462	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5444	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
2782	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5512	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
5466	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
8028	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
5510	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
5509	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
5303	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0

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APRIL 2020



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

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Candia, NH		Stream Crossing Detail Sheet			SADES ID 196
Prioritization Score	**29**	**Traffic Volume**	**<30,000**	**Crossing Type**	**Not Surveyed**
		Asset Manager ID'd	**Yes**	**Road Name**	**Route 101 (West Bound)**
		Flood Hazard ID'd	**No**	**Stream Name**	**No Name**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Steel Corrugated Round Culvert**
		Culvert Condition	**Fair**	**Crossing Width**	**4.00'**
		10-Yr Hydraulic Vuln.	**Not Applicable**	**Open Height**	**4.00'**
		Crossing Material	**Metal**	**Obstruction**	**No Data**
		Beaver Activity	**No**	**Assessment Date**	**07/02/2019**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Candia, NH		Stream Crossing Detail Sheet			SADES ID 5464
Prioritization Score	**29**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**North Road**
		Flood Hazard ID'd	**No**	**Stream Name**	**No Name**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Steel Corrugated Elliptical Culv.**
		Culvert Condition	**Poor**	**Crossing Width**	**5.60'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Metal**	**Obstruction**	**Wood**
		Beaver Activity	**No**	**Assessment Date**	**06/07/2016**

SNHPC

Detail Sheet Created: January 17, 2020

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Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Candia, NH		Stream Crossing Detail Sheet			SADES ID 197
Prioritization Score	**25**	**Traffic Volume**	**<30,000**	**Crossing Type**	**Wetland**
		Asset Manager ID'd	**Yes**	**Road Name**	**Route 101 (East Bound)**
		Flood Hazard ID'd	**No**	**Stream Name**	**No Name**
		Flood Zone Category	**Minimal Hazard**	**Structure Type**	**Steel Corrugated Round Culvert**
		Culvert Condition	**Fair**	**Crossing Width**	**4.00'**
		10-Yr Hydraulic Vuln.	**Not Applicable**	**Open Height**	**4.00'**
		Crossing Material	**Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**07/31/2014**

SNHPC

Detail Sheet Created: January 17, 2020

API



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Candia, NH		Stream Crossing Detail Sheet			SADES ID 14741
Prioritization Score	**24**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Wetland**
		Asset Manager ID'd	**Yes**	**Road Name**	**Brown Road**
		Flood Hazard ID'd	**No**	**Stream Name**	**No Name**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Concrete Round Culvert**
		Culvert Condition	**Poor**	**Crossing Width**	**4.00'**
		10-Yr Hydraulic Vuln.	**Not Applicable**	**Open Height**	**3.50'**
		Crossing Material	**Not Metal**	**Obstruction**	**Wood and Sediment**
		Beaver Activity	**No**	**Assessment Date**	**07/05/2019**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION

SNHPC

Detail Sheet Created: January 17, 2020

API 85



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Candia, NH		Stream Crossing Detail Sheet			SADES ID 999910
Prioritization Score	**22**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Wetland**
		Asset Manager ID'd	**Yes**	**Road Name**	**Brown Road**
		Flood Hazard ID'd	**No**	**Stream Name**	**Unknown**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Unknown**
		Culvert Condition	**Unknown**	**Crossing Width**	**Unknown**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**Unknown**
		Crossing Material	**Not Metal**	**Obstruction**	**Unknown**
		Beaver Activity	**No**	**Assessment Date**	**Not Yet Surveyed**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020

API

Prioritization Score Statistical Summary: Town of Candia

Traffic Volumes

Count	Totals
AADT>=30,000	0
AADT<30,000	5
AADT<20,000	0
AADT<10,000	4
AADT<5,000	15
AADT<1,000	49
TOTAL:	73

10-Yr Vulnerability

Category	Count
Overtop	0
Vulnerable	0
Unknown	49
Pass	0
Not Applicable	24
TOTAL:	73

Beaver Activity

Yes	4
No	69
TOTAL:	73

Total Crossings

Region	1515
Town	73

Flood Zone

Count	Totals
Floodway	0
100-Year Flood Zone	34
500-Year Flood Zone	0
Minimal Hazard	39
TOTAL:	73

Structure Material

Metal	9
Not Metal	64
TOTAL:	73

Flood Hazard

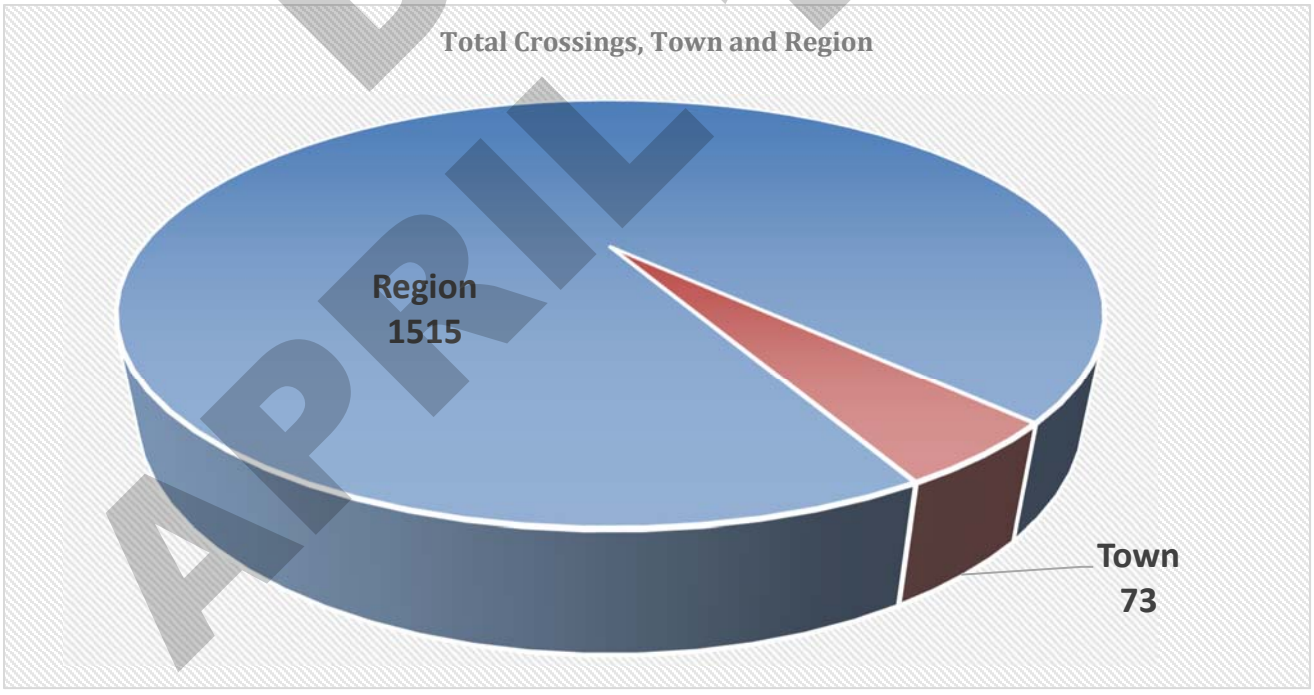
ID'd	14
Not ID'd	59
TOTAL:	73

Culvert Condition

Poor	8
Fair	12
Good	37
Unknown	16
TOTAL:	73

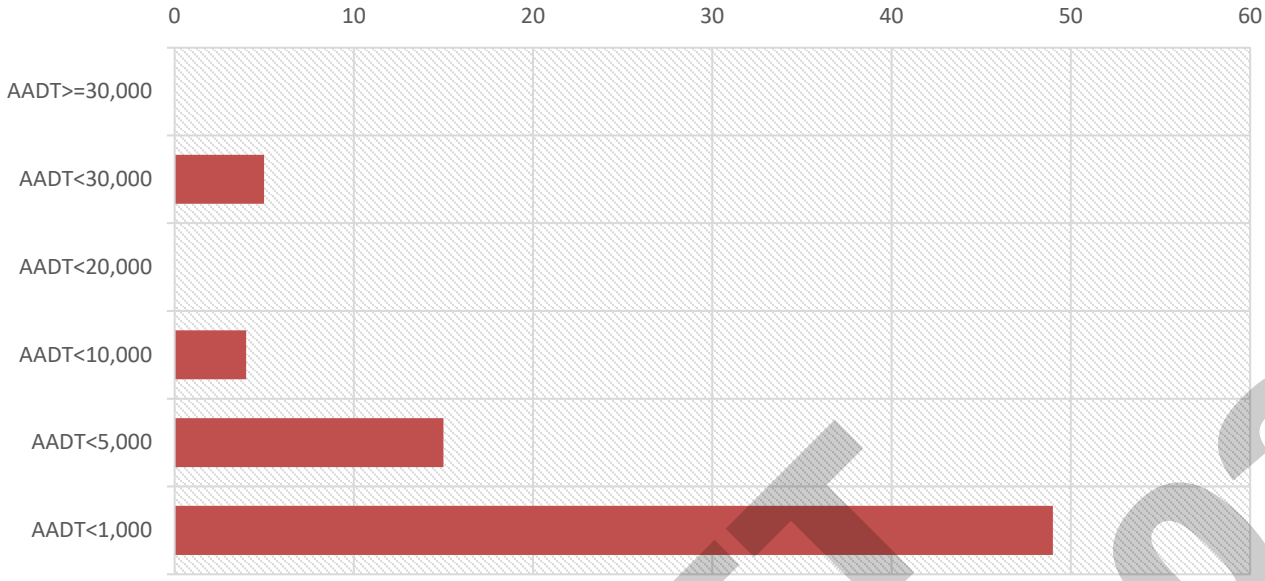
Asset Manager

ID'd	11
Not ID'd	62
TOTAL:	73



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APRIL 13, 2020

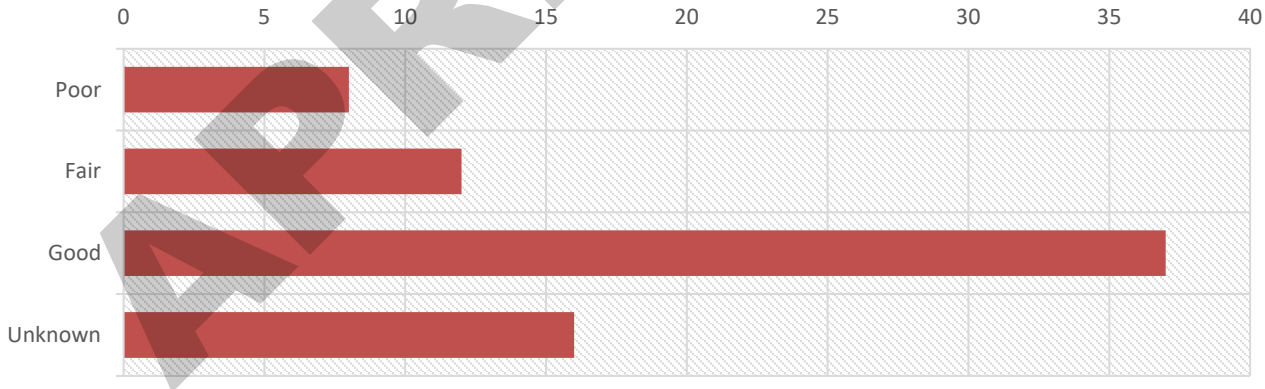
Muni. Count by Traffic Volume Category



Muni. Count by FEMA Flood Zone Categorey

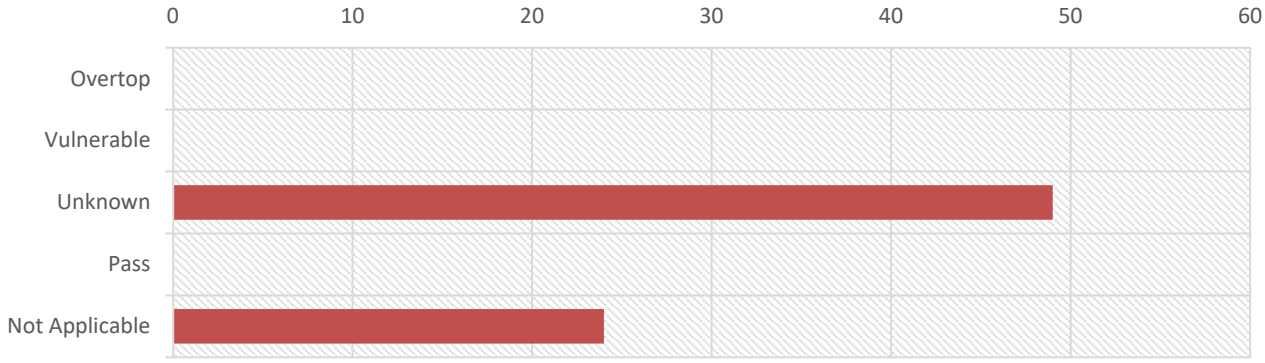


Muni. Count by Stream Crossing Condition

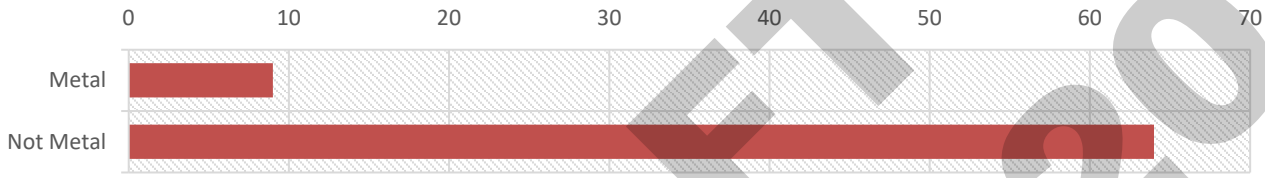


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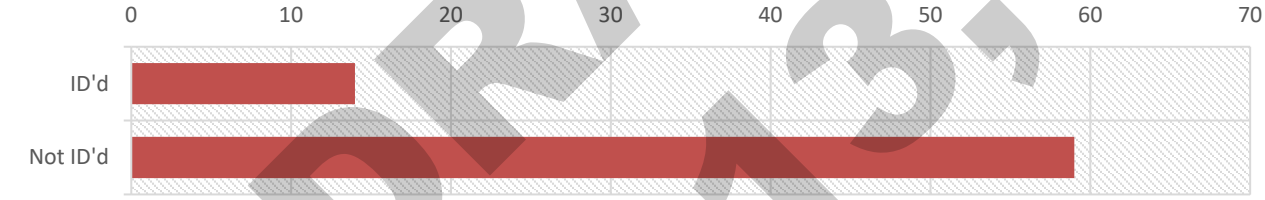
Muni. Count by 10-Yr Vulnerability



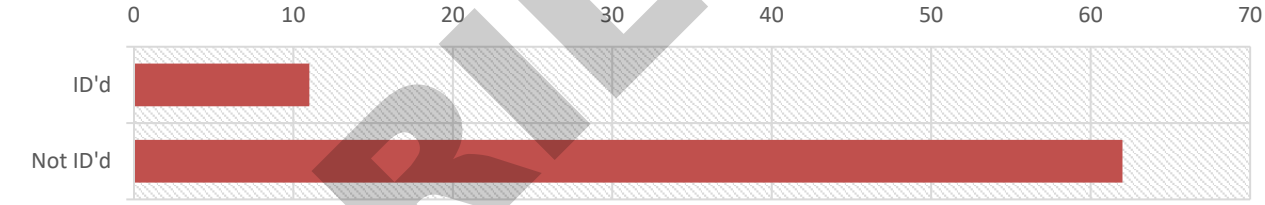
Muni. Count By Structure Material



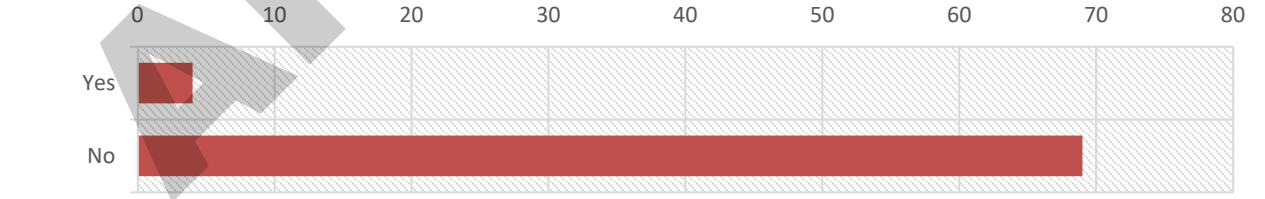
Muni. Count by Identified Flood Hazard History



Muni. Count by Asset Manager Identification



Total Region Count by Beaver Activity



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APRIL

Prioritization Results: Town of Chester

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
8732	AADT<5,000	2	Yes	10	Yes	5	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	Yes	2	33
6868	AADT<10,000	4	Yes	10	Yes	5	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	28
6804	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	28
6506	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Poor	10	Not Applicable	0	Metal	2	No	0	27
6945	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	24
6109	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	24
6987	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	23
6160	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	23
6917	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Fair	5	Not Applicable	0	Metal	2	No	0	22
14944	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	20
6772	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	19
6246	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	19
6245	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	19
6849	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Not Metal	0	Yes	2	19
6779	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	18
6505	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	18
7013	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	17
6774	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	17
6161	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	Yes	2	15
6112	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
6108	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
6949	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	14
6846	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	14
6986	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	14
6946	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
6773	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	13
999853	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
6111	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	10
6869	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
8740	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
6947	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
6851	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	Yes	2	8
6775	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
14943	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
7012	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
6247	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
6850	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	7
2712	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	7
6870	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	6
6983	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
6847	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
6213	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
6211	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
6210	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5

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Prioritization Results: Town of Chester

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
8739	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	5
8738	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	5
6950	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	5
6919	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
6807	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6778	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6777	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6504	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6250	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	5
6248	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6215	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6214	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6212	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6162	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	5
6110	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6984	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6948	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6918	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6848	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6806	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6805	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6776	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6249	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6159	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6157	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6107	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
6985	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6916	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6251	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6216	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6163	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6158	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0

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Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Chester, NH		Stream Crossing Detail Sheet			SADES ID 8732
Prioritization Score	**33**	**Traffic Volume**	**<5,000**	**Crossing Type**	**Wetland**
		Asset Manager ID'd	**Yes**	**Road Name**	**Candia Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Data**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Plastic Smooth Round Culvert**
		Culvert Condition	**Poor**	**Crossing Width**	**2.00'**
		10-Yr Hydraulic Vuln.	**Not Applicable**	**Open Height**	**2.00'**
		Crossing Material	**Not Metal**	**Obstruction**	**Wood and Sediment**
		Beaver Activity	**Yes**	**Assessment Date**	**7/20/2017**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020

API



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

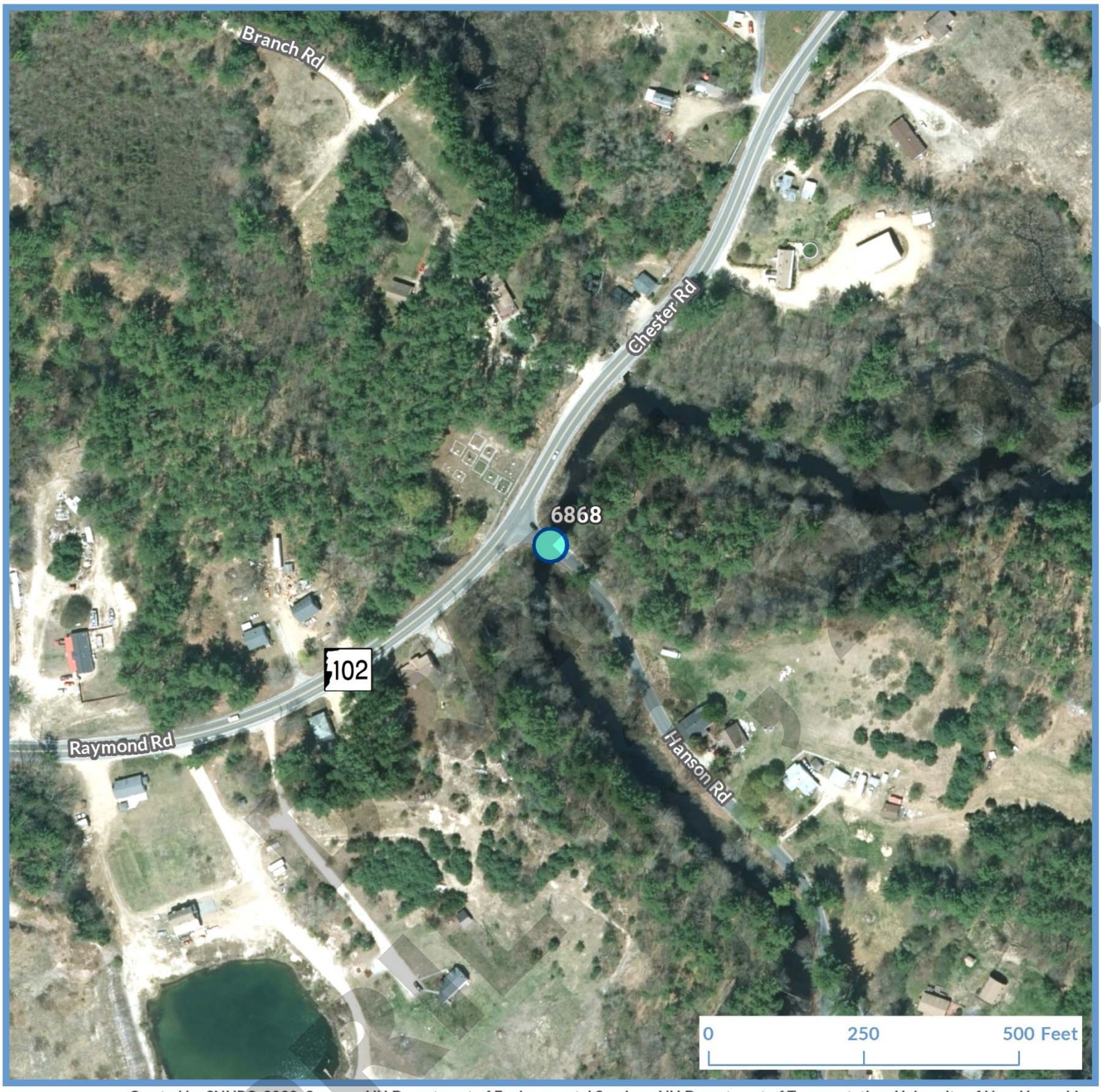
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Chester, NH		Stream Crossing Detail Sheet			SADES ID 6804
Prioritization Score	**28**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**Hall Village Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Data**
		Flood Zone Category	**Minimal Hazard**	**Structure Type**	**Concrete Round Culvert**
		Culvert Condition	**Poor**	**Crossing Width**	**2.50'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**Sediment**
		Beaver Activity	**No**	**Assessment Date**	**7/29/2016**

SOUTHERN NEW HAMPSHIRE PLANNING COMMISSION

SNHPC

Detail Sheet Created: January 17, 2020



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Chester, NH		Stream Crossing Detail Sheet			SADES ID 6868
Prioritization Score	**28**	**Traffic Volume**	**<10,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**Hanson Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Data**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Conc. Bridge with Abutments**
		Culvert Condition	**Fair**	**Crossing Width**	**24.00'**
		10-Yr Hydraulic Vuln.	**Not Applicable**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**08/02/2016**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020

APPROVED

Prioritization Score Statistical Summary: Town of Chester

Traffic Volumes

Count	Totals
AADT>=30,000	0
AADT<30,000	0
AADT<20,000	0
AADT<10,000	12
AADT<5,000	9
AADT<1,000	55
TOTAL:	76

10-Yr Vulnerability

Category	Count
Overtop	0
Vulnerable	0
Unknown	58
Pass	0
Not Applicable	18
TOTAL:	76

Beaver Activity

Yes	10
No	66
TOTAL:	76

Total Crossings

Region	1512
Town	76

Flood Zone

Count	Totals
Floodway	0
100-Year Flood Zone	9
500-Year Flood Zone	0
Minimal Hazard	67
TOTAL:	76

Structure Material

Metal	23
Not Metal	53
TOTAL:	76

Flood Hazard

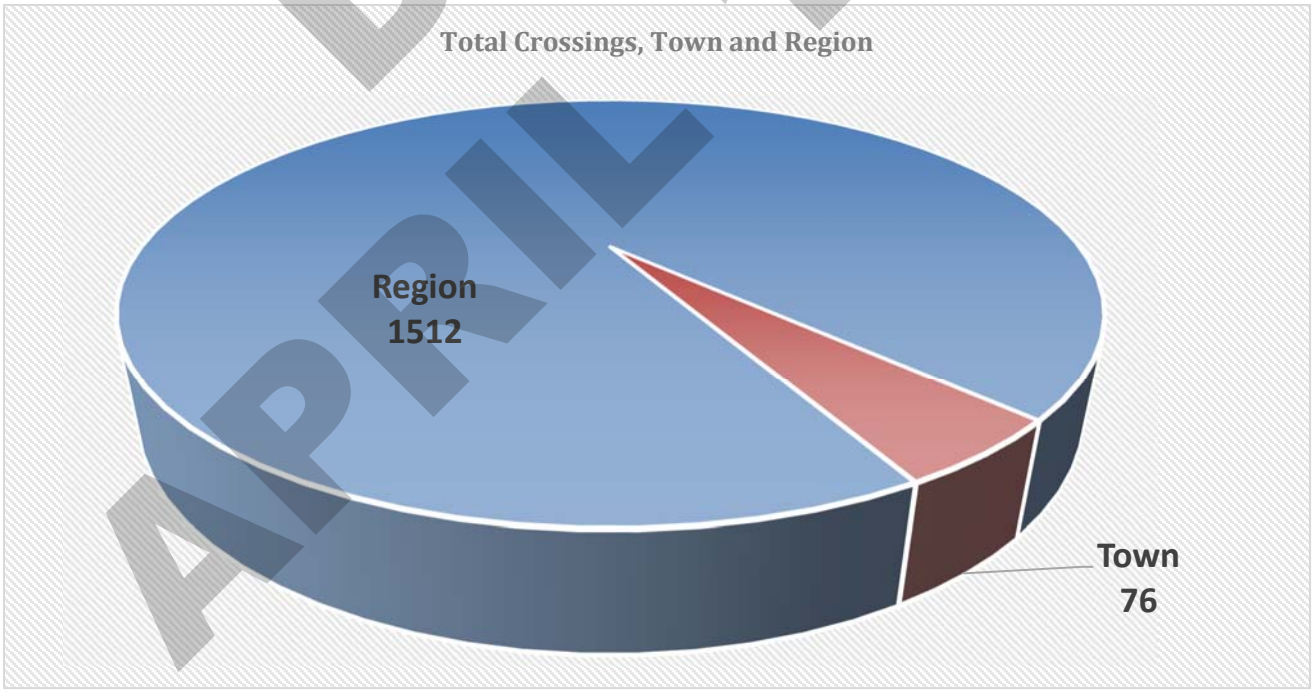
ID'd	14
Not ID'd	62
TOTAL:	76

Culvert Condition

Poor	15
Fair	9
Good	48
Unknown	4
TOTAL:	76

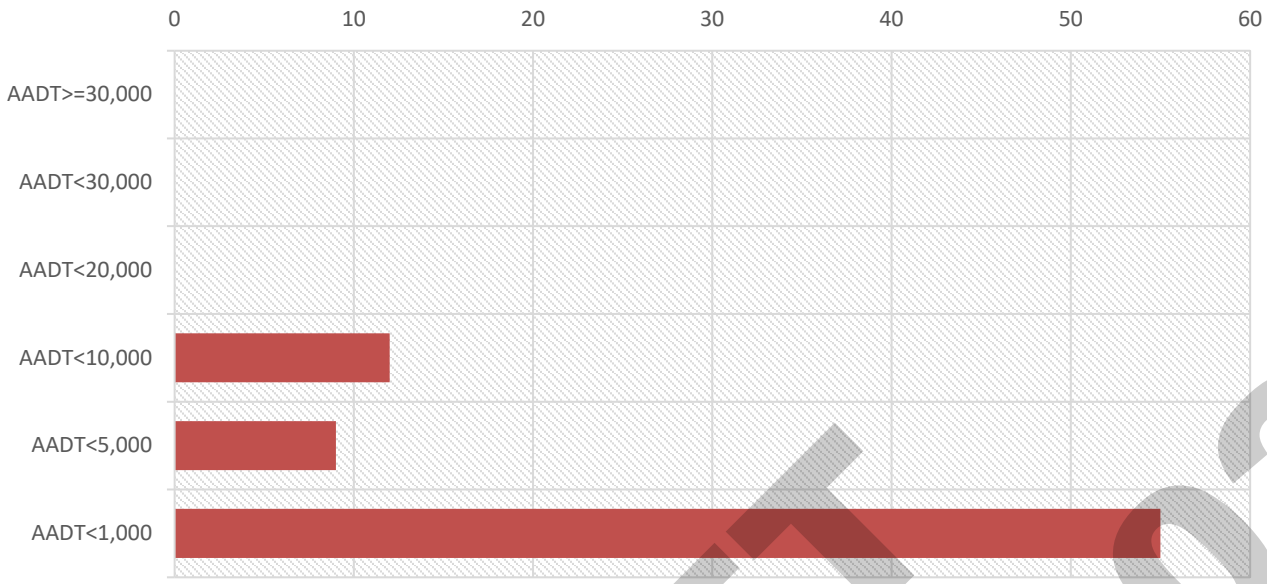
Asset Manager

ID'd	12
Not ID'd	64
TOTAL:	76

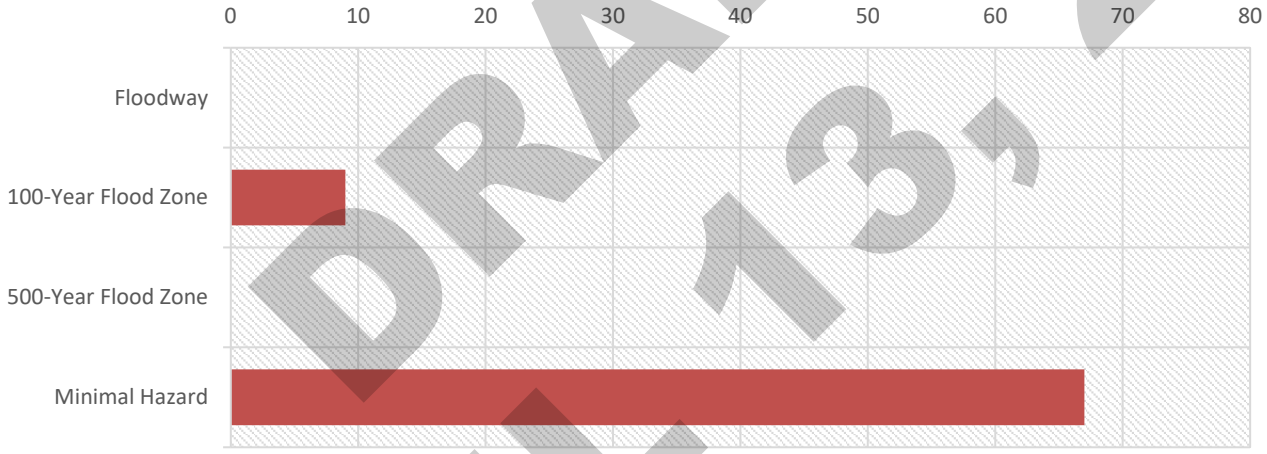


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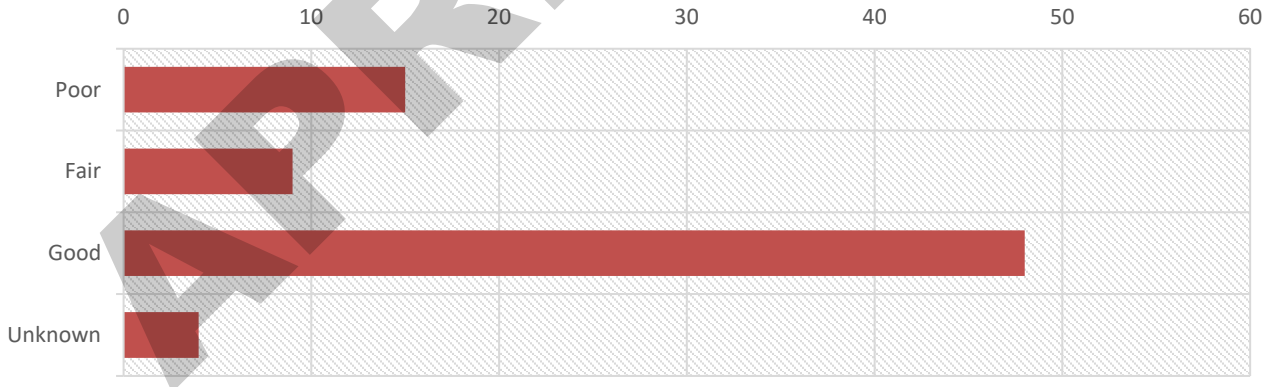
Muni. Count by Traffic Volume Category



Muni. Count by FEMA Flood Zone Categorey

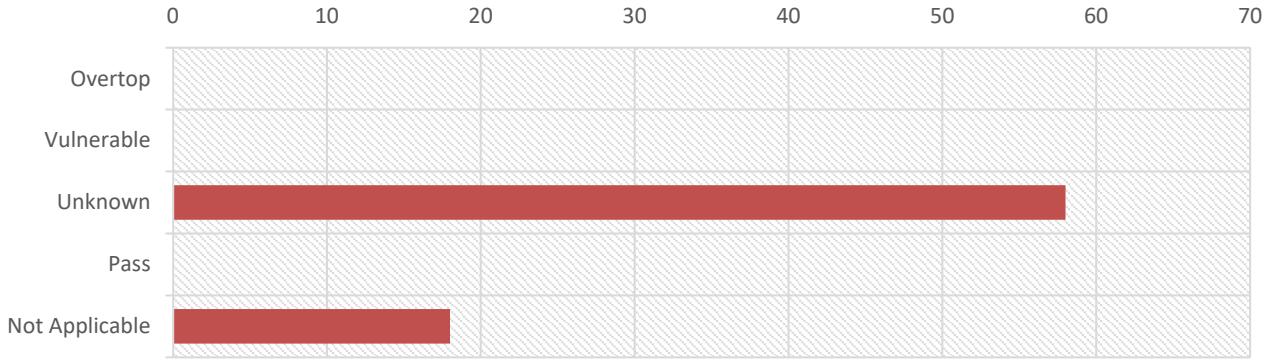


Muni. Count by Stream Crossing Condition

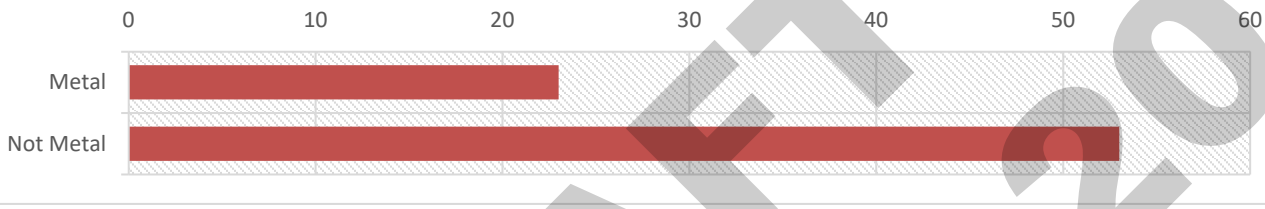


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APRIL 13, 2020

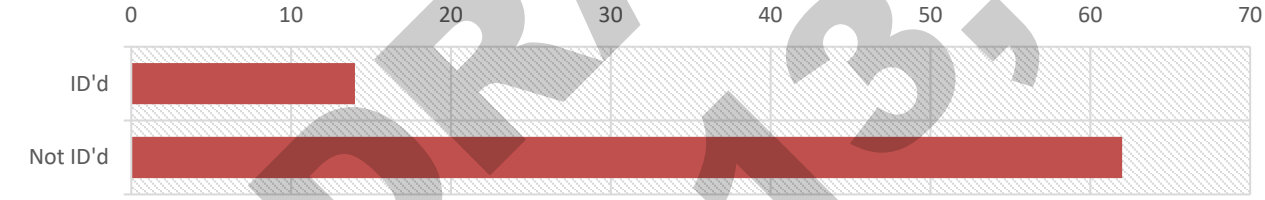
Muni. Count by 10-Yr Vulnerability



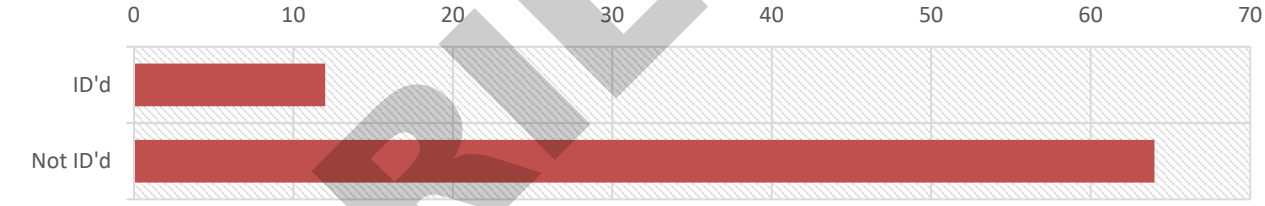
Muni. Count By Structure Material



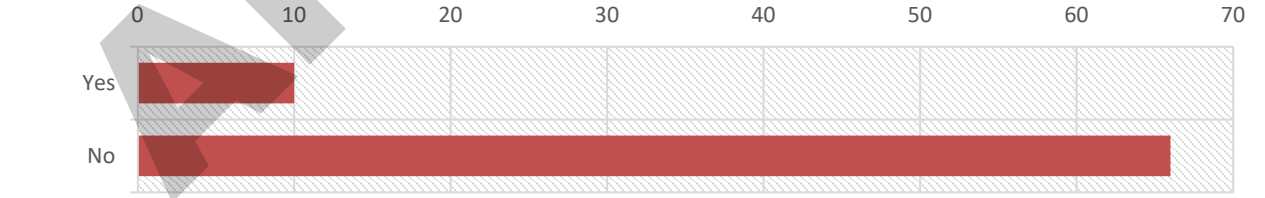
Muni. Count by Identified Flood Hazard History



Muni. Count by Asset Manager Identification



Total Region Count by Beaver Activity



DRAFT 13, 2020
APRIL

Prioritization Results: Town of Deerfield

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
6022	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Vulnerable	4	Not Metal	0	No	0	25
6669	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	24
7916	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	No	0	23
149	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Not Metal	0	Yes	2	23
8730	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	Yes	2	21
999915	AADT<5,000	2	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	20
999916	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	19
7918	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	Yes	2	19
5543	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	19
7629	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	18
7627	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	18
7899	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	16
6023	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Poor	10	Vulnerable	4	Not Metal	0	No	0	16
957	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	16
8731	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	Yes	2	16
7624	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Metal	2	No	0	16
7622	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
7901	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14
14744	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	Yes	2	14
14743	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	Yes	2	14
7917	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	Yes	2	14
7902	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	14
7625	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	14
7619	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	14
7609	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	14
949	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	No	0	14
2771	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	12
8727	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
7930	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
7631	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
7612	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
7601	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
7600	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
7597	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
7596	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
960	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
961	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	11
5198	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	11
6026	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	11
959	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	11
7610	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	10
6024	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Overtop	5	Not Metal	0	No	0	10
2743	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	9
2742	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	9

DRAFT 10/2020

Prioritization Results: Town of Deerfield

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
6668	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
2738	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
8728	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
8013	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
7632	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
7623	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
7621	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
7620	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
7615	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
7608	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
6670	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
962	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
7900	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	8
958	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	8
148	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	8
8780	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	Yes	2	8
7603	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
5541	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
2741	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
7616	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
7614	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
7602	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
6667	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
955	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
7919	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	6
956	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	6
8024	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
7931	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
2736	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
8016	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
7618	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
7617	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
7607	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
7594	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
7630	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
7606	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
7628	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
7626	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
7613	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
7611	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
7605	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
7604	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
7599	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
7598	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3

DRAFT 8/18/20

Prioritization Results: Town of Deerfield

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
7595	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5542	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5540	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
2737	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
7928	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0

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APRIL 13, 2020



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Deerfield, NH		Stream Crossing Detail Sheet			SADES ID 6022
Prioritization Score	**25**	**Traffic Volume**	**<5,000**	**Crossing Type**	**Stream**
SNHPC Detail Sheet Created: January 17, 2020		**Asset Manager ID'd**	**No**	**Road Name**	**North Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Fairly Brook**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Conc. Round Culvert**
		Culvert Condition	**Poor**	**Crossing Width**	**3.00'**
		10-Yr Hydraulic Vuln.	**Vulnerable**	**Open Height**	**3.00'**
		Crossing Material	**Not Metal**	**Obstruction**	**Wood**
		Beaver Activity	**No**	**Assessment Date**	**07/05/2016**

API



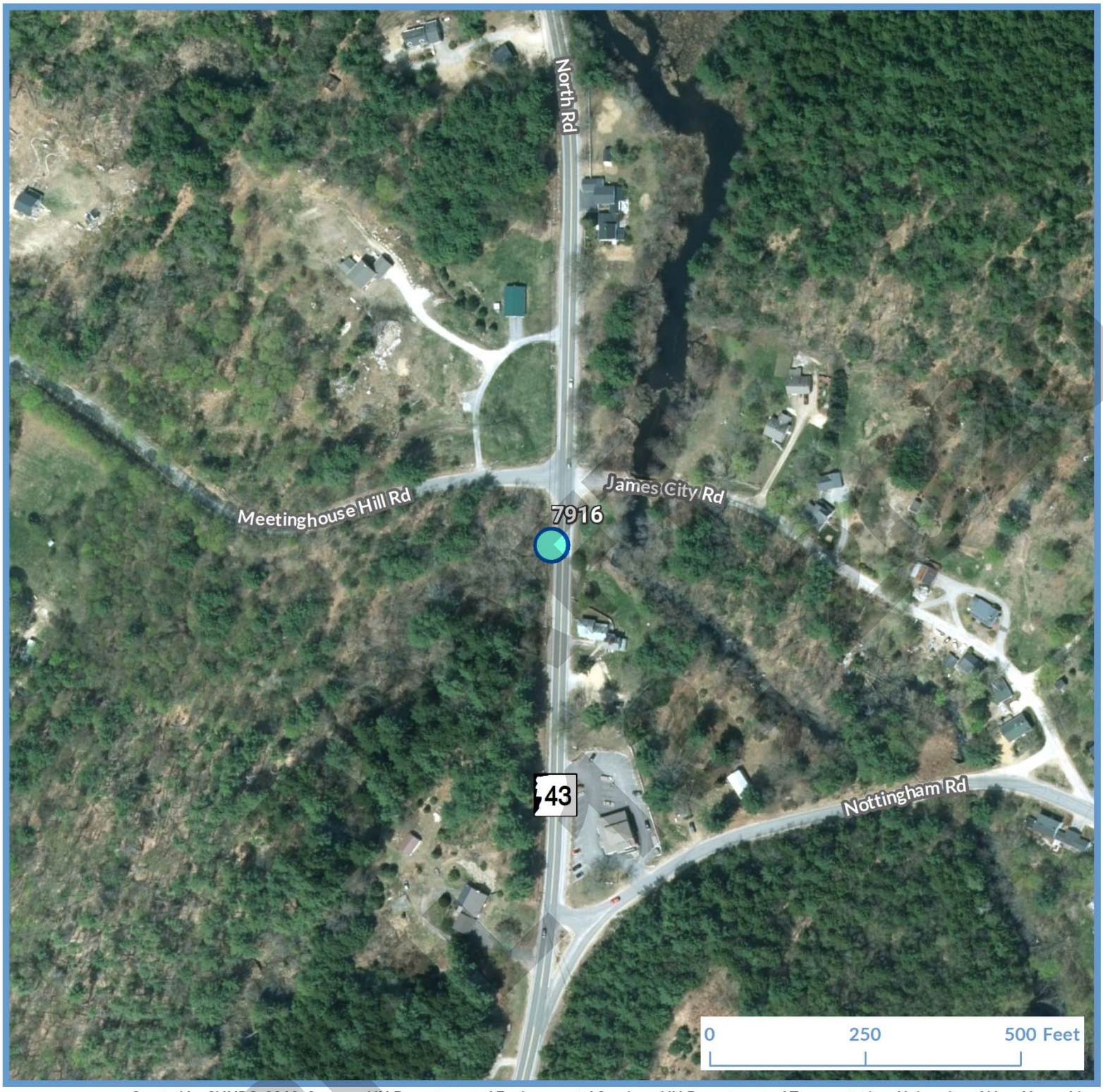
Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Deerfield, NH		Stream Crossing Detail Sheet			SADES ID 6669
Prioritization Score	**24**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**No**	**Road Name**	**Mountain Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Data**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Steel Corrugated Round Culvert**
		Culvert Condition	**Poor**	**Crossing Width**	**2.33'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**2.33'**
		Crossing Material	**Metal**	**Obstruction**	**Wood & Sediment**
		Beaver Activity	**No**	**Assessment Date**	**07/25/2016**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020

APPROVED



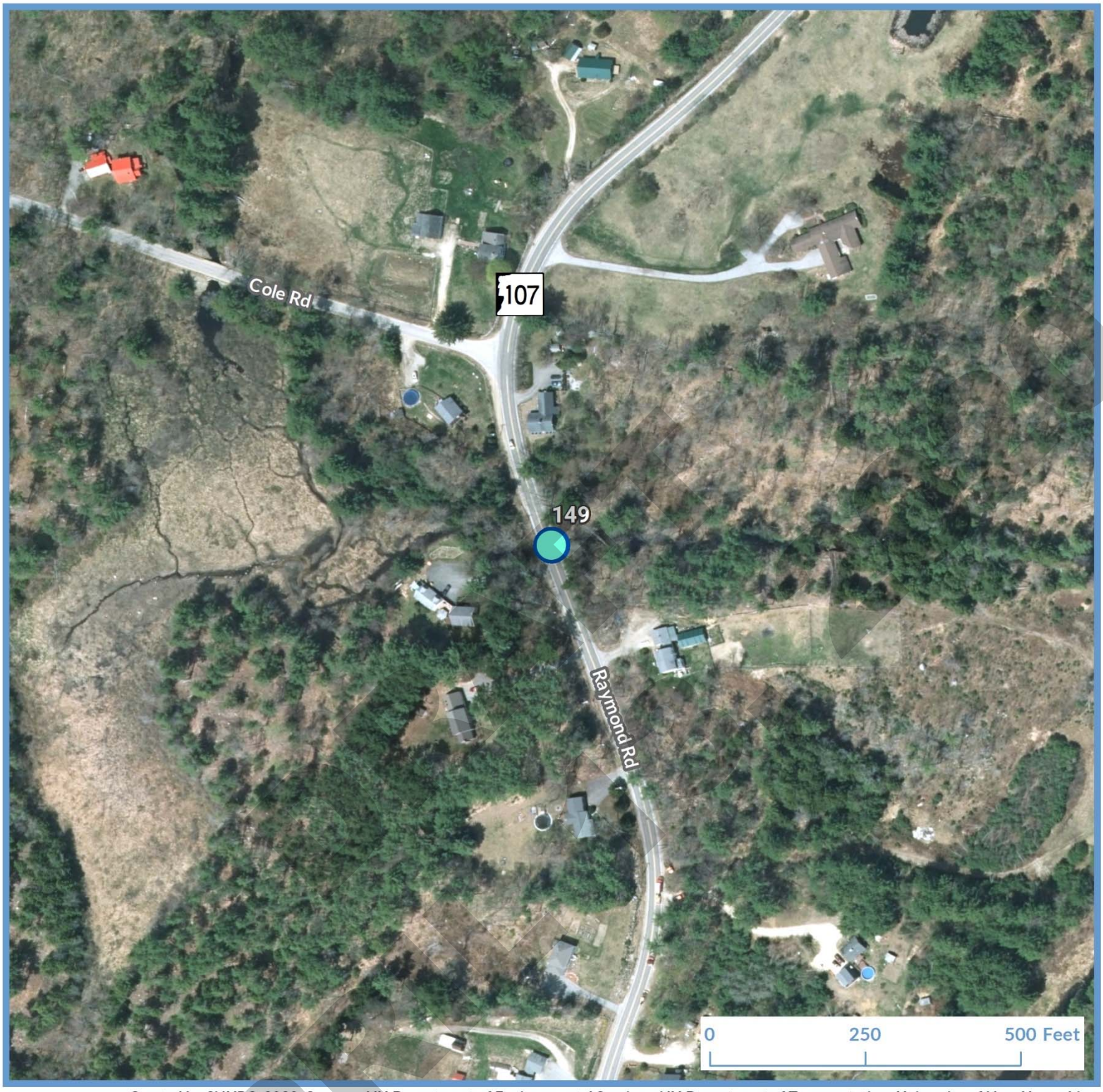
Created by SNHPC, 2019. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Deerfield, NH		Stream Crossing Detail Sheet			SADES ID 7916
Prioritization Score	**23**	**Traffic Volume**	**<10,000**	**Crossing Type**	**Wetland**
		Asset Manager ID'd	**No**	**Road Name**	**Route 43 (North Road)**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Data**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Concrete Round Culvert**
		Culvert Condition	**Poor**	**Crossing Width**	**2.00'**
		10-Yr Hydraulic Vuln.	**Not Applicable**	**Open Height**	**2.00'**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**06/09/2017**

SNHPC

Detail Sheet Created: January 17, 2020

API



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Deerfield, NH		Stream Crossing Detail Sheet			SADES ID 149
Prioritization Score	**23**	**Traffic Volume**	**<10,000**	**Crossing Type**	**Stream**
SNHPC		**Asset Manager ID'd**	**No**	**Road Name**	**Raymond Road**
		Flood Hazard ID'd	**No**	**Stream Name**	**Nicholls Brook**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Conc. Bridge with Abutments**
		Culvert Condition	**Poor**	**Crossing Width**	**5.00'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
Detail Sheet Created: January 17, 2020		**Beaver Activity**	**Yes**	**Assessment Date**	**06/20/2019**

APPROVED

Prioritization Score Statistical Summary: Town of Deerfield

Traffic Volumes

Count	Totals
AADT>=30,000	0
AADT<30,000	0
AADT<20,000	0
AADT<10,000	9
AADT<5,000	16
AADT<1,000	68
TOTAL:	93

10-Yr Vulnerability

Category	Count
Overtop	1
Vulnerable	2
Unknown	62
Pass	0
Not Applicable	28
TOTAL:	93

Beaver Activity

Yes	14
No	79
TOTAL:	93

Total Crossings

Region	1495
Town	93

Flood Zone

Count	Totals
Floodway	0
100-Year Flood Zone	59
500-Year Flood Zone	0
Minimal Hazard	34
TOTAL:	93

Structure Material

Metal	19
Not Metal	74
TOTAL:	93

Flood Hazard

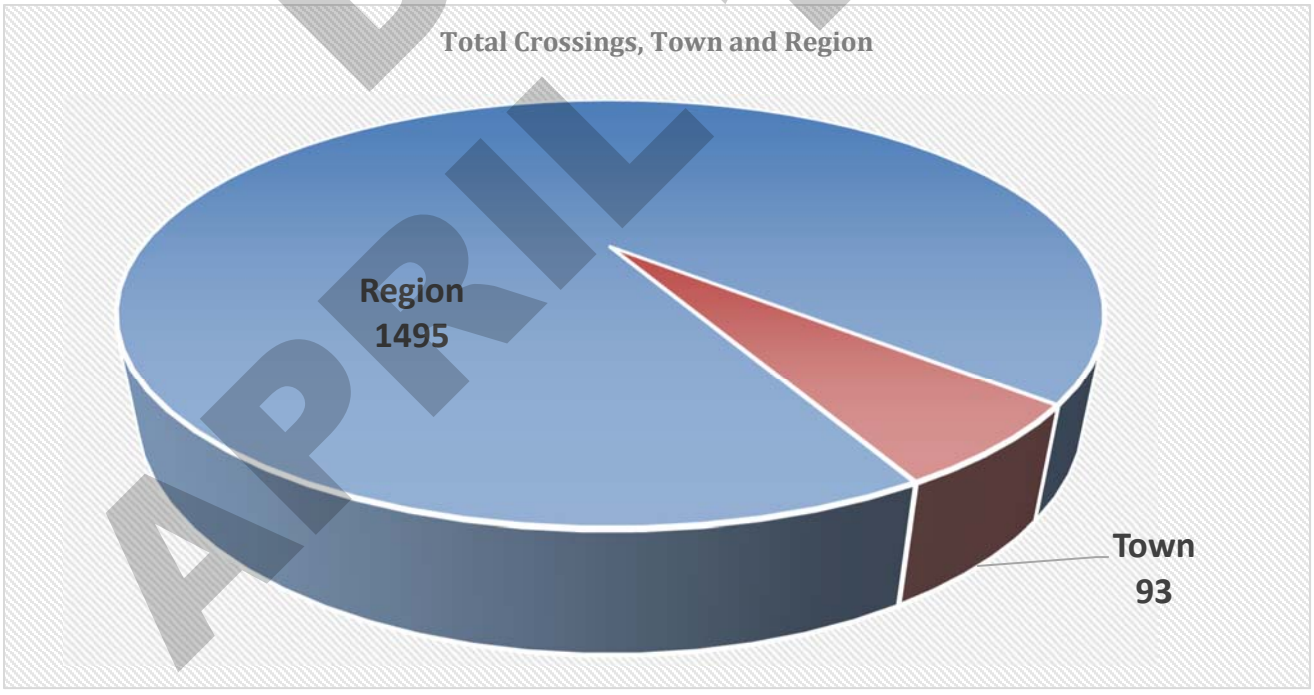
ID'd	39
Not ID'd	54
TOTAL:	93

Culvert Condition

Poor	12
Fair	7
Good	71
Unknown	3
TOTAL:	93

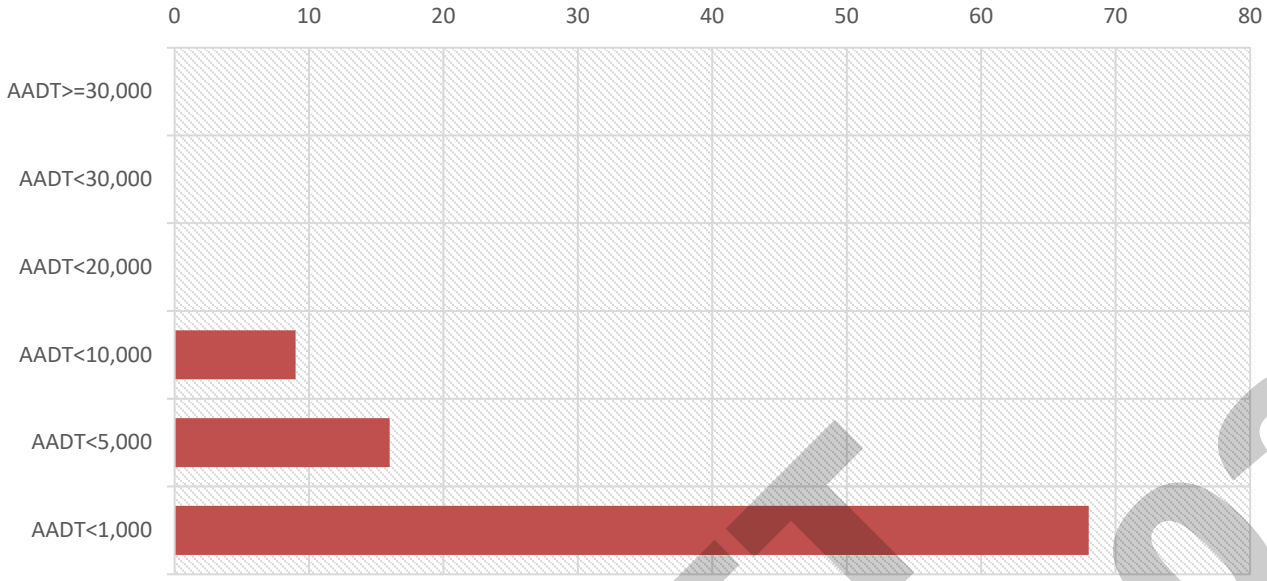
Asset Manager

ID'd	1
Not ID'd	92
TOTAL:	93

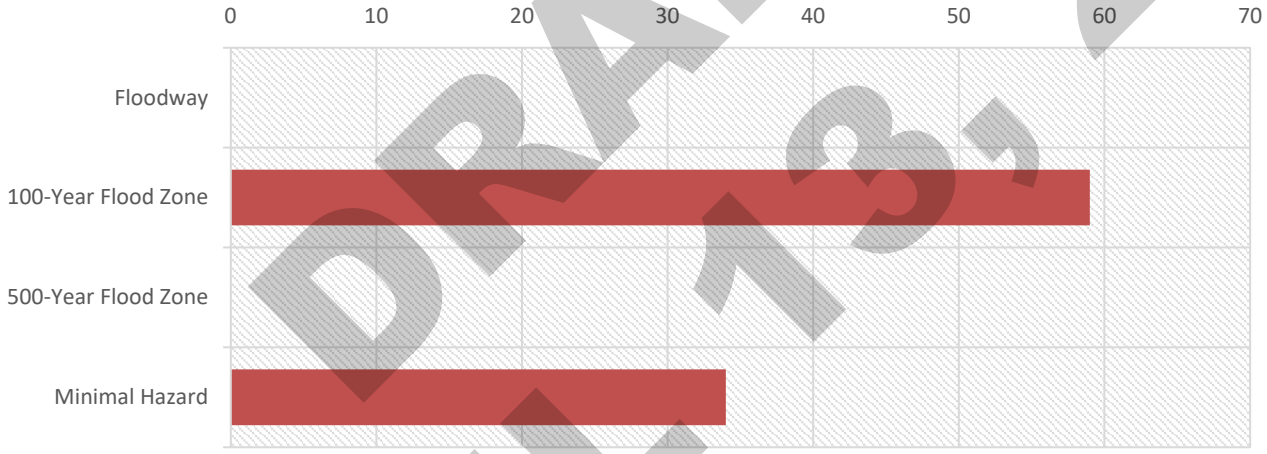


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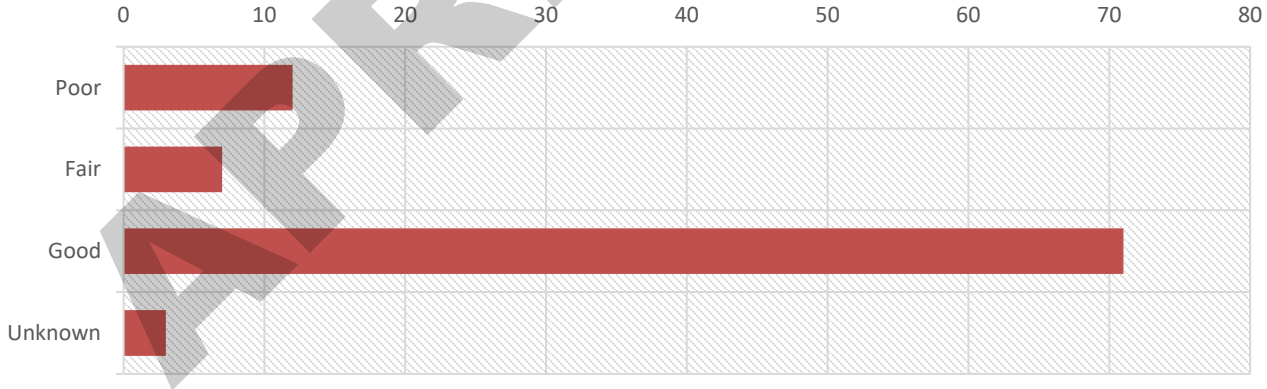
Muni. Count by Traffic Volume Category



Muni. Count by FEMA Flood Zone Categorey

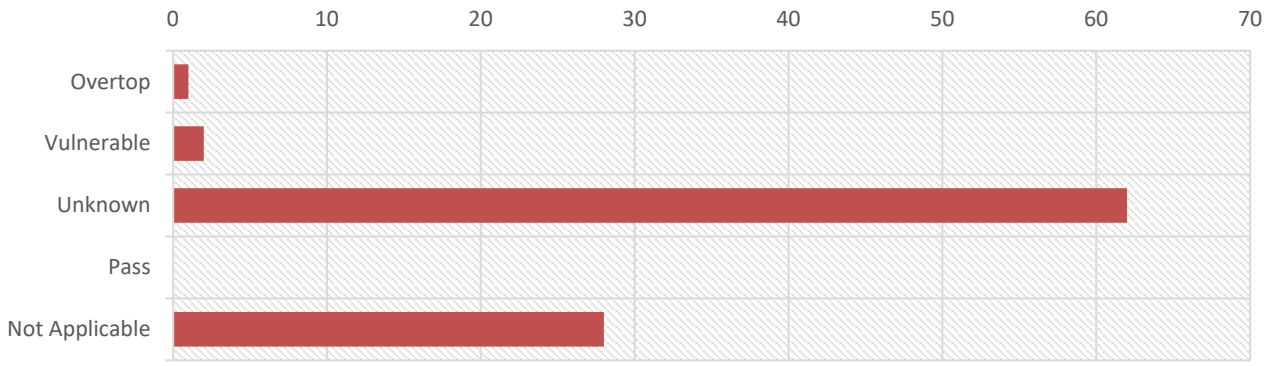


Muni. Count by Stream Crossing Condition

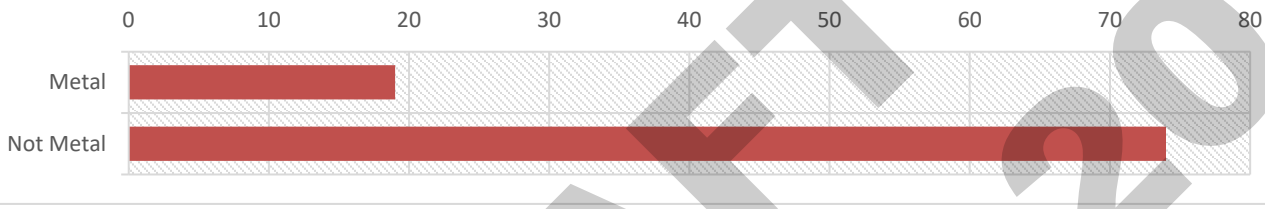


DRAFT APRIL 13, 2020

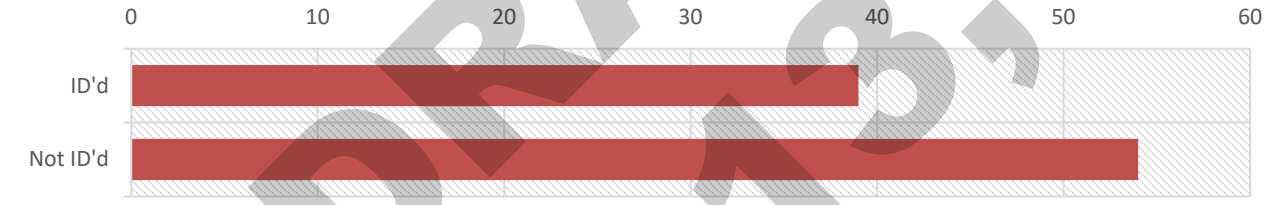
Muni. Count by 10-Yr Vulnerability



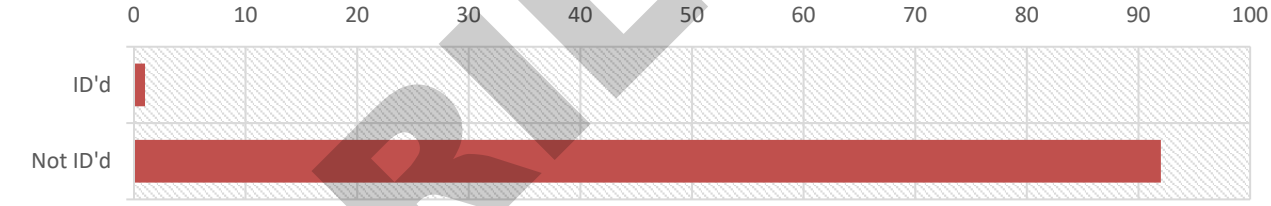
Muni. Count By Structure Material



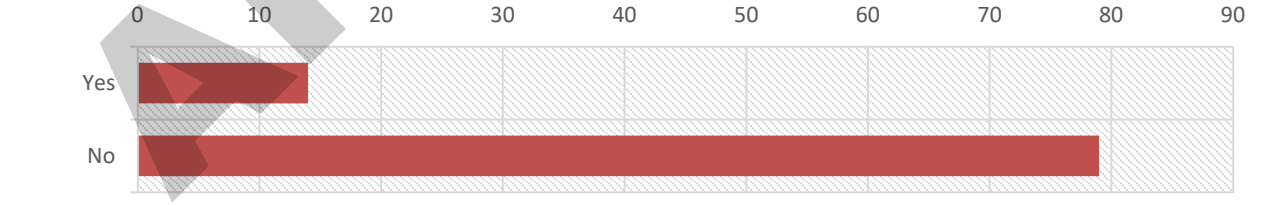
Muni. Count by Identified Flood Hazard History



Muni. Count by Asset Manager Identification



Total Region Count by Beaver Activity



DRAFT APRIL 13, 2020

Prioritization Results: Town of Derry

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
6232	AADT<5,000	2	Yes	10	Yes	5	Floodway	5	Poor	10	Unknown	3	Metal	2	No	0	37
999971	AADT>=30,000	10	No	0	Yes	5	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	28
6357	AADT<5,000	2	Yes	10	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	25
5997	AADT<1,000	0	No	0	Yes	5	Floodway	5	Poor	10	Unknown	3	Metal	2	No	0	25
200	AADT<10,000	4	No	0	Yes	5	Floodway	5	Fair	5	Unknown	3	Not Metal	0	Yes	2	24
5995	AADT<1,000	0	No	0	Yes	5	Floodway	5	Poor	10	Unknown	3	Not Metal	0	No	0	23
5994	AADT<5,000	2	No	0	No	0	Floodway	5	Poor	10	Unknown	3	Not Metal	0	Yes	2	22
12510	AADT<1,000	0	No	0	Yes	5	Floodway	5	Fair	5	Overtop	5	Not Metal	0	Yes	2	22
6294	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	21
10217	AADT<1,000	0	No	0	Yes	5	Floodway	5	Fair	5	Vulnerable	4	Metal	2	No	0	21
5958	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Metal	2	No	0	21
12610	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	No	0	20
10281	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	20
6200	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	20
6264	AADT<20,000	6	No	0	No	0	Floodway	5	Fair	5	Unknown	3	Not Metal	0	No	0	19
6414	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	19
6358	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	19
999918	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	18
6262	AADT<20,000	6	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	18
6202	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	18
15380	AADT<1,000	0	No	0	No	0	Floodway	5	Poor	10	Unknown	3	Not Metal	0	No	0	18
10224	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	18
999917	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	17
6230	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	17
6468	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	17
6355	AADT<1,000	0	No	0	Yes	5	Floodway	5	Fair	5	Not Applicable	0	Metal	2	No	0	17
5962	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	17
6544	AADT<20,000	6	No	0	No	0	Floodway	5	Fair	5	Not Applicable	0	Not Metal	0	No	0	16
6263	AADT<20,000	6	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	16
6035	AADT<20,000	6	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	16
5999	AADT<20,000	6	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	16
6419	AADT<10,000	4	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Metal	2	No	0	16
12515	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Poor	10	Vulnerable	4	Not Metal	0	No	0	16
10259	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Vulnerable	4	Metal	2	No	0	16
10226	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Vulnerable	4	Metal	2	No	0	16
201	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	15
12511	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	15
6034	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	15
6032	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	15
5996	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	15
10235	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
6512	AADT<1,000	0	No	0	Yes	5	500-Year Flood Zone	3	Good	0	Unknown	3	Metal	2	Yes	2	15
6261	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
6201	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	15

DRAFT 2020

Prioritization Results: Town of Derry

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
6197	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
12546	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	14
10308	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	14
10306	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	14
6412	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	14
6411	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	14
6033	AADT<20,000	6	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	14
6029	AADT<10,000	4	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	14
12493	AADT<5,000	2	No	0	No	0	Floodway	5	Fair	5	Not Applicable	0	Metal	2	No	0	14
10309	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	14
10264	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Overtop	5	Not Metal	0	No	0	14
10262	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Metal	2	No	0	14
10260	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	14
10236	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Vulnerable	4	Metal	2	No	0	13
999984	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	13
999965	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	13
12508	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Vulnerable	4	Not Metal	0	No	0	13
12488	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
12487	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Vulnerable	4	Not Metal	0	No	0	13
6028	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	13
5960	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	13
12484	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	12
999999	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
12532	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	12
6417	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Metal	2	No	0	12
6293	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	12
1334	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	12
10237	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	12
5998	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	12
999975	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
10283	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Metal	2	No	0	12
10263	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Metal	2	No	0	12
6508	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
6415	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
6265	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	12
6231	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
6027	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	11
12696	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Vulnerable	4	Metal	2	No	0	11
10280	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Vulnerable	4	Metal	2	No	0	11
6509	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	11
10282	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	10
10233	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	10
12697	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	10
12514	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Not Applicable	0	Not Metal	0	No	0	10

DRAFT 8/2020

Prioritization Results: Town of Derry

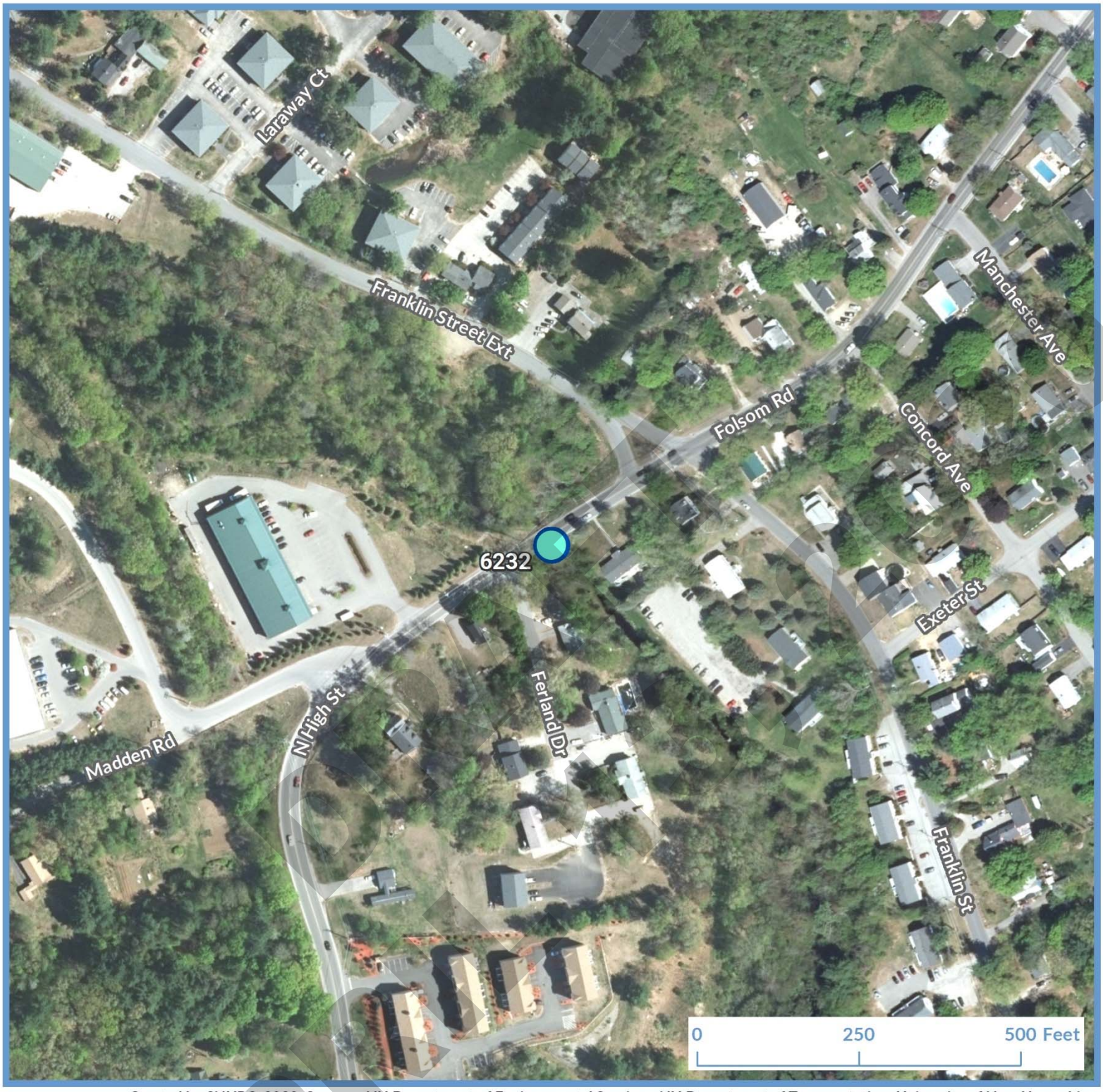
SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
12509	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
12507	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
10304	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	10
10265	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	10
10223	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Pass	0	Not Metal	0	No	0	10
10221	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Overtop	5	Not Metal	0	No	0	10
6352	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	10
6031	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
6030	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
6266	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
5961	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
12698	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	9
10215	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Pass	0	Not Metal	0	No	0	9
6507	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	9
2688	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Metal	2	No	0	9
10225	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	9
6469	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Metal	2	Yes	2	9
6359	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
6543	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	8
10388	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
10305	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
10220	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
10214	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
7099	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	8
6462	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
6295	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Fair	5	Not Applicable	0	Not Metal	0	No	0	8
15123	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	7
10261	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	Yes	2	7
6418	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
2689	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
12491	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	5
12485	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	5
10311	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Pass	0	Not Metal	0	No	0	5
10310	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	5
10279	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	5
10234	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Pass	0	Not Metal	0	No	0	5
10222	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Pass	0	Not Metal	0	No	0	5
10213	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
7098	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
6510	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6465	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
6464	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6463	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	5
6413	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5

DRAFT 8/18/20

Prioritization Results: Town of Derry

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
6354	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
12492	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
10303	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6467	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6466	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6416	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6353	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6292	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6291	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6267	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6199	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6198	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5957	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5755	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
12486	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
10266	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
10219	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
10218	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
6511	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6356	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6351	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
5959	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
5754	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0

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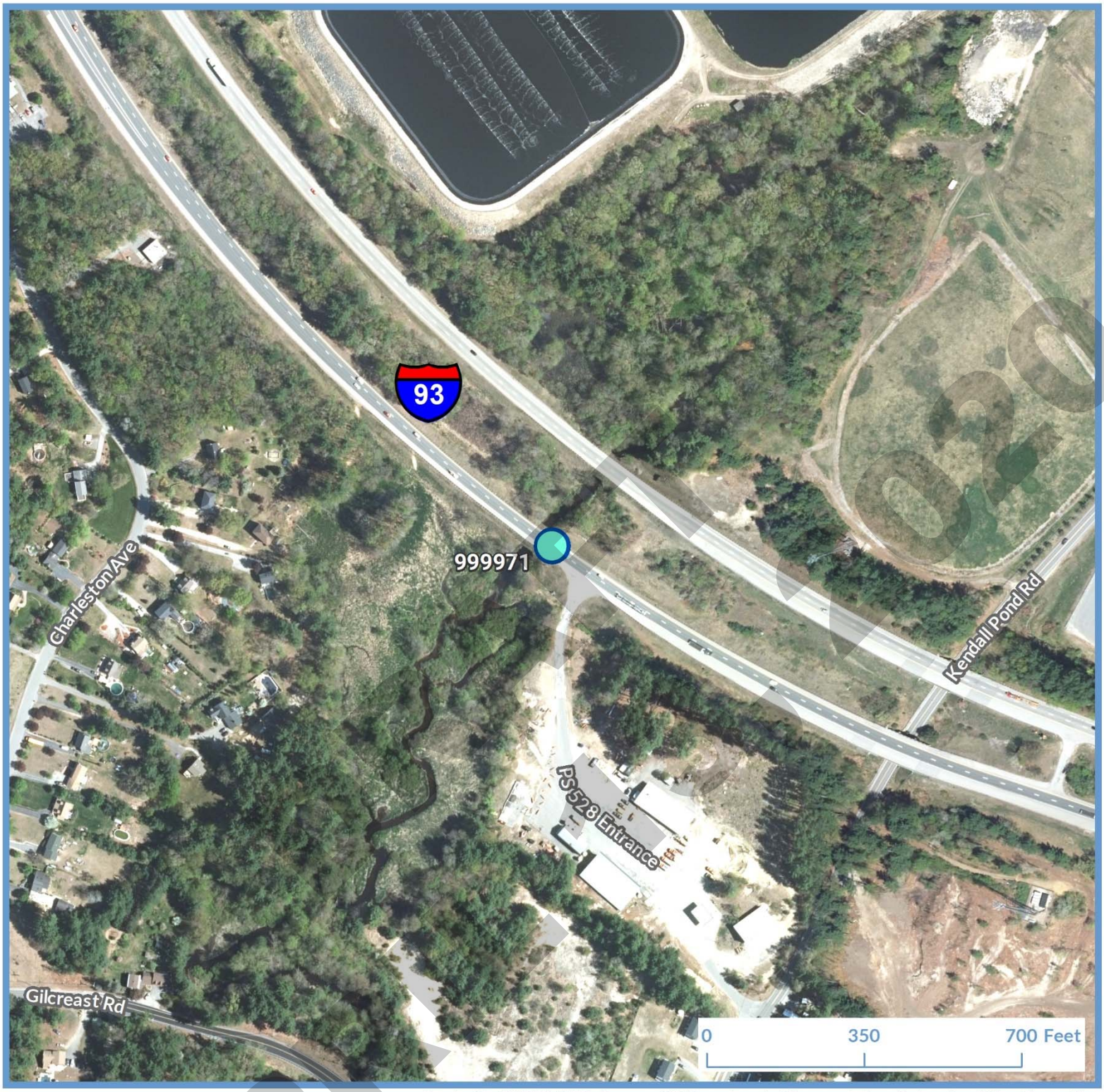
Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Derry, NH		Stream Crossing Detail Sheet			SADES ID 6232
Prioritization Score	**37**	**Traffic Volume**	**<5,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**Madden Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Beaver Brook**
		Flood Zone Category	**Floodway**	**Structure Type**	**Elliptical Steel Corrugated Culv.**
		Culvert Condition	**Poor**	**Crossing Width**	**7.00'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**07/11/2016**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
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Detail Sheet Created: January 17, 2020

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Created by SNHPC, 2020. Sources: NH Department of Transportation; University of New Hampshire.

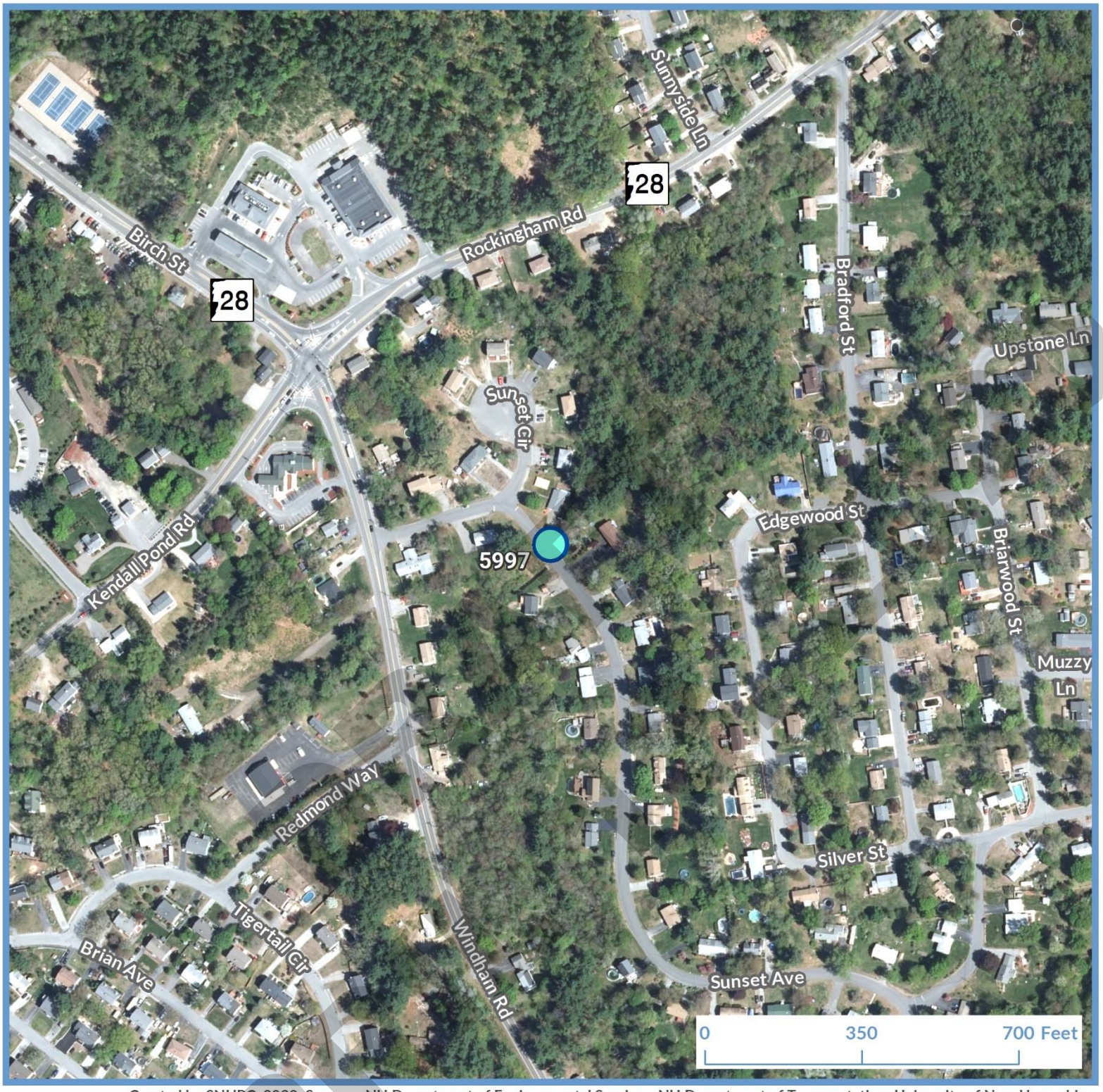
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Derry, NH		Stream Crossing Detail Sheet			SADES ID 999971
Prioritization Score	**28**	**Traffic Volume**	**>=30,000**	**Crossing Type**	**No Data**
		Asset Manager ID'd	**No**	**Road Name**	**Interstate 93**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Data**
		Flood Zone Category	**Floodway**	**Structure Type**	**No Data**
		Culvert Condition	**Unknown**	**Crossing Width**	**No Data**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**No Data**	**Obstruction**	**No Data**
		Beaver Activity	**No**	**Assessment Date**	**Not Yet Surveyed**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION

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Detail Sheet Created: January 17, 2020



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Derry, NH		Stream Crossing Detail Sheet			SADES ID 5997
Prioritization Score	**25**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**No**	**Road Name**	**Sunset Avenue**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Name**
		Flood Zone Category	**Floodway**	**Structure Type**	**Steel Corrugated Elliptical Culv.**
		Culvert Condition	**Poor**	**Crossing Width**	**4.75'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Metal**	**Obstruction**	**Sediment**
		Beaver Activity	**No**	**Assessment Date**	**07/01/2016**

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Detail Sheet Created: January 17, 2020

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Derry, NH		Stream Crossing Detail Sheet			SADES ID 6357
Prioritization Score	**25**	**Traffic Volume**	**<5,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**North Shore Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Name**
		Flood Zone Category	**Floodway**	**Structure Type**	**Concrete Bridge W/Abutments**
		Culvert Condition	**Good**	**Crossing Width**	**11.95'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**07/14/2016**

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Detail Sheet Created: January 17, 2020

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Derry, NH		Stream Crossing Detail Sheet			SADES ID 200
Prioritization Score	**24**	**Traffic Volume**	**<10,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**No**	**Road Name**	**Chester Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Cato Brook**
		Flood Zone Category	**Floodway**	**Structure Type**	**Concrete Round Culvert**
		Culvert Condition	**Fair**	**Crossing Width**	**3.00'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**3.00'**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
		Beaver Activity	**Yes**	**Assessment Date**	**06/22/2018**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020

Prioritization Score Statistical Summary: Town of Derry

Traffic Volumes

Count	Totals
AADT>=30,000	1
AADT<30,000	0
AADT<20,000	19
AADT<10,000	15
AADT<5,000	18
AADT<1,000	102
TOTAL:	155

10-Yr Vulnerability

Category	Count
Overtop	5
Vulnerable	11
Unknown	88
Pass	7
Not Applicable	44
TOTAL:	155

Beaver Activity

Yes	9
No	146
TOTAL:	155

Total Crossings

Region	1433
Town	155

Flood Zone

Count	Totals
Floodway	40
100-Year Flood Zone	28
500-Year Flood Zone	3
Minimal Hazard	84
TOTAL:	155

Structure Material

Metal	39
Not Metal	116
TOTAL:	155

Flood Hazard

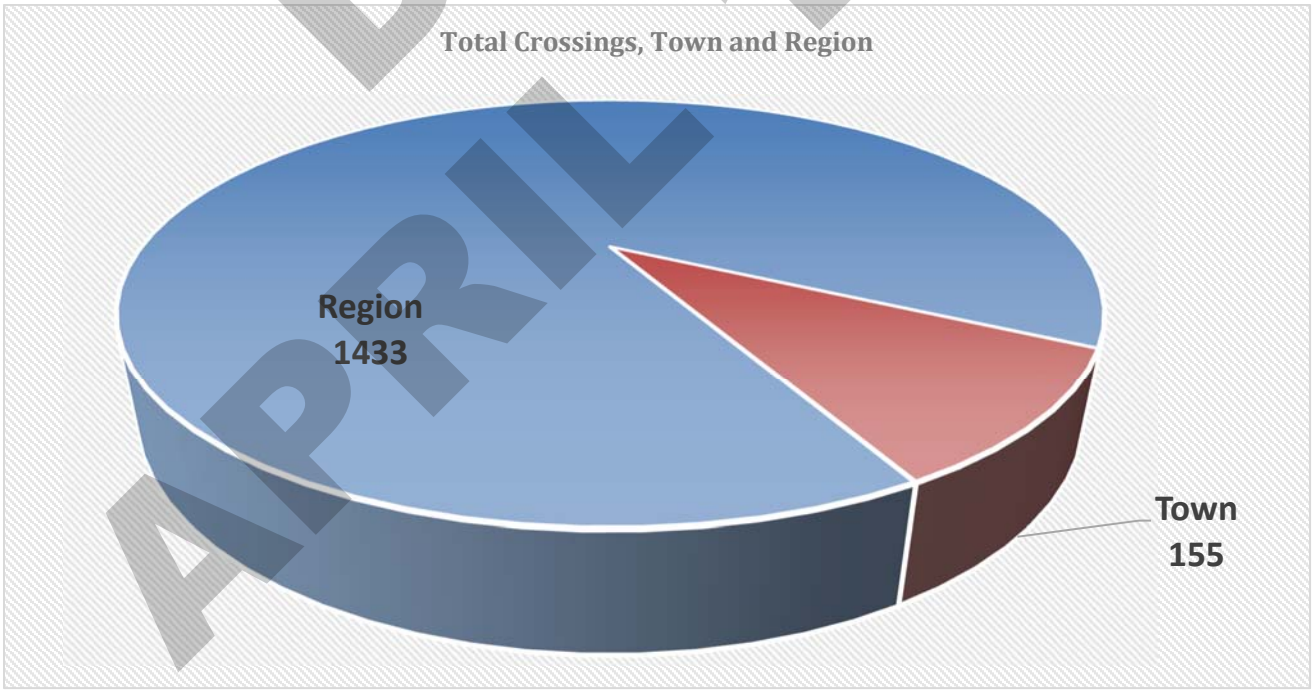
ID'd	46
Not ID'd	109
TOTAL:	155

Culvert Condition

Poor	22
Fair	55
Good	71
Unknown	7
TOTAL:	155

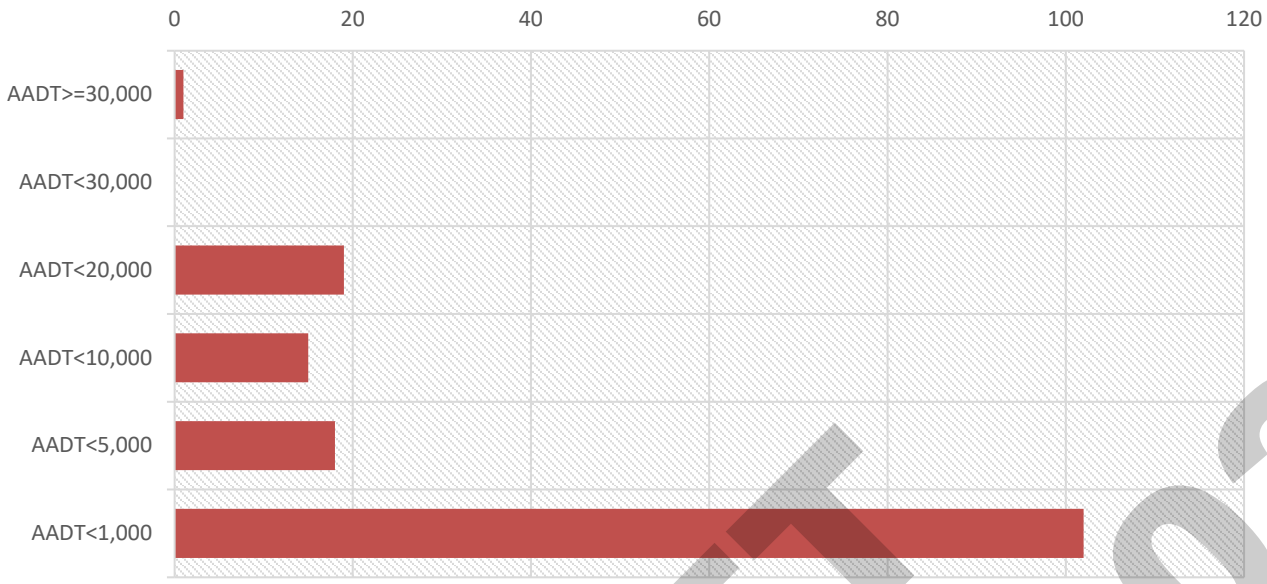
Asset Manager

ID'd	2
Not ID'd	153
TOTAL:	155



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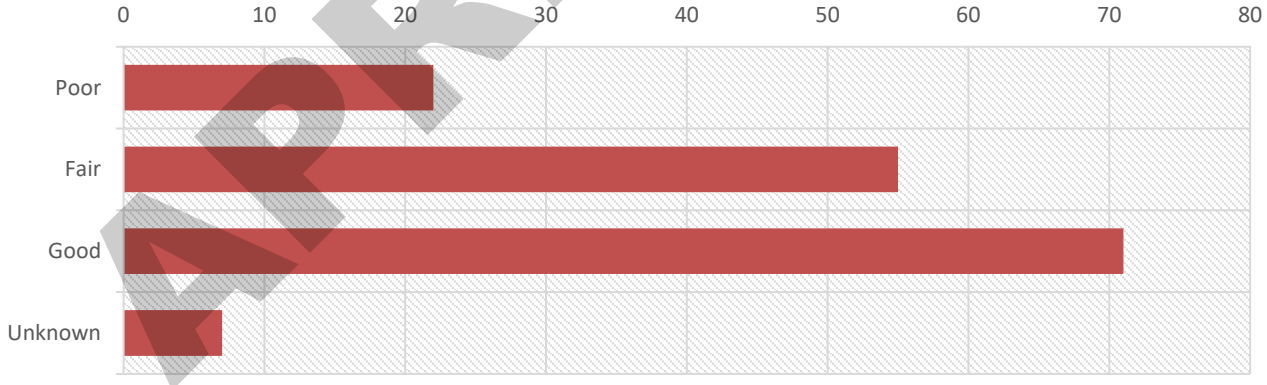
Muni. Count by Traffic Volume Category



Muni. Count by FEMA Flood Zone Categorey

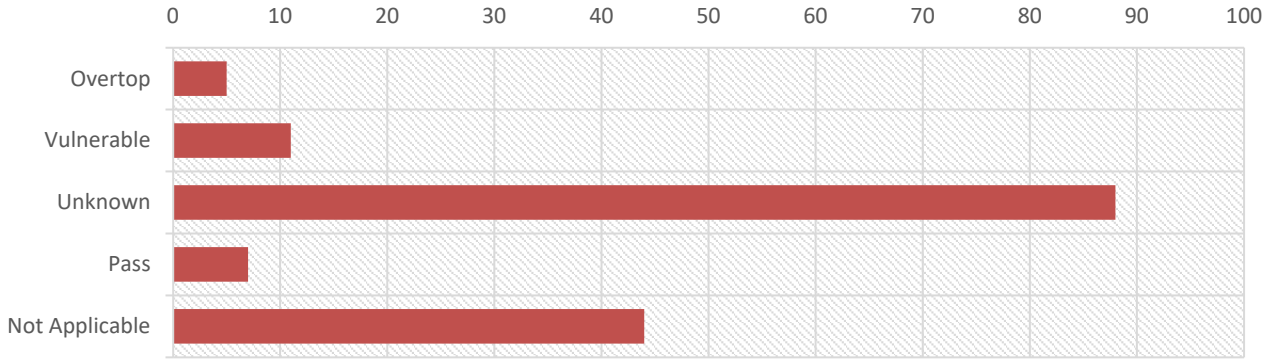


Muni. Count by Stream Crossing Condition

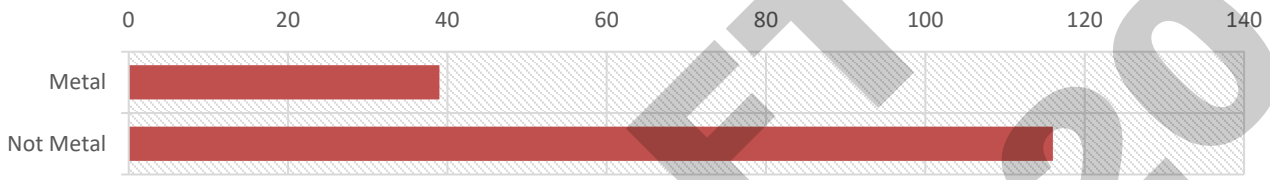


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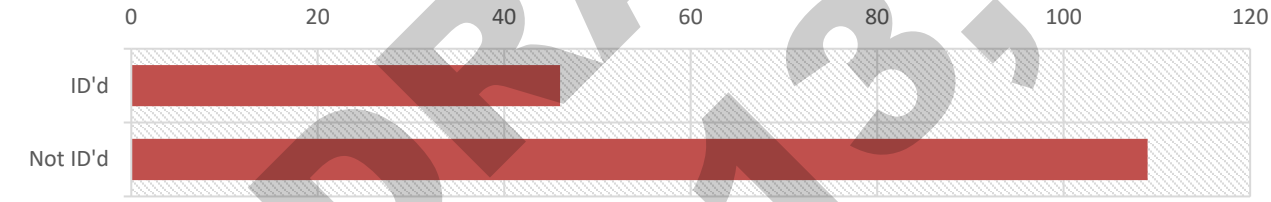
Muni. Count by 10-Yr Vulnerability



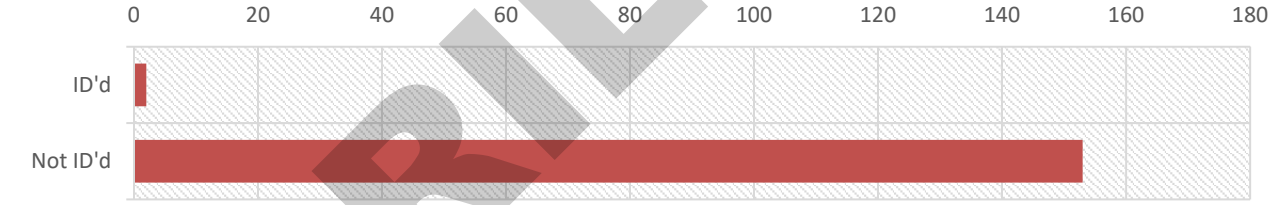
Muni. Count By Structure Material



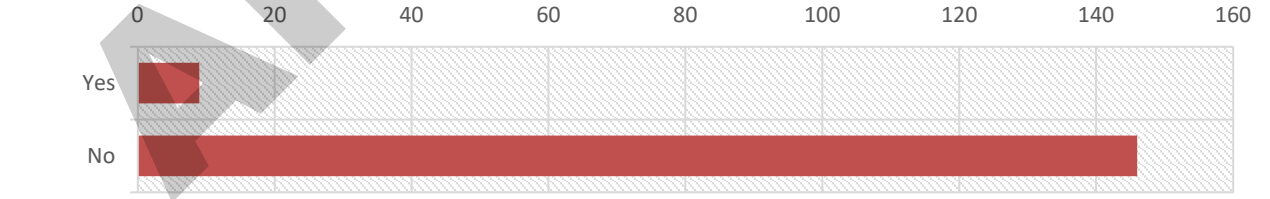
Muni. Count by Identified Flood Hazard History



Muni. Count by Asset Manager Identification



Total Region Count by Beaver Activity



DRAFT 13, 2020
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Prioritization Results: Town of Francestown

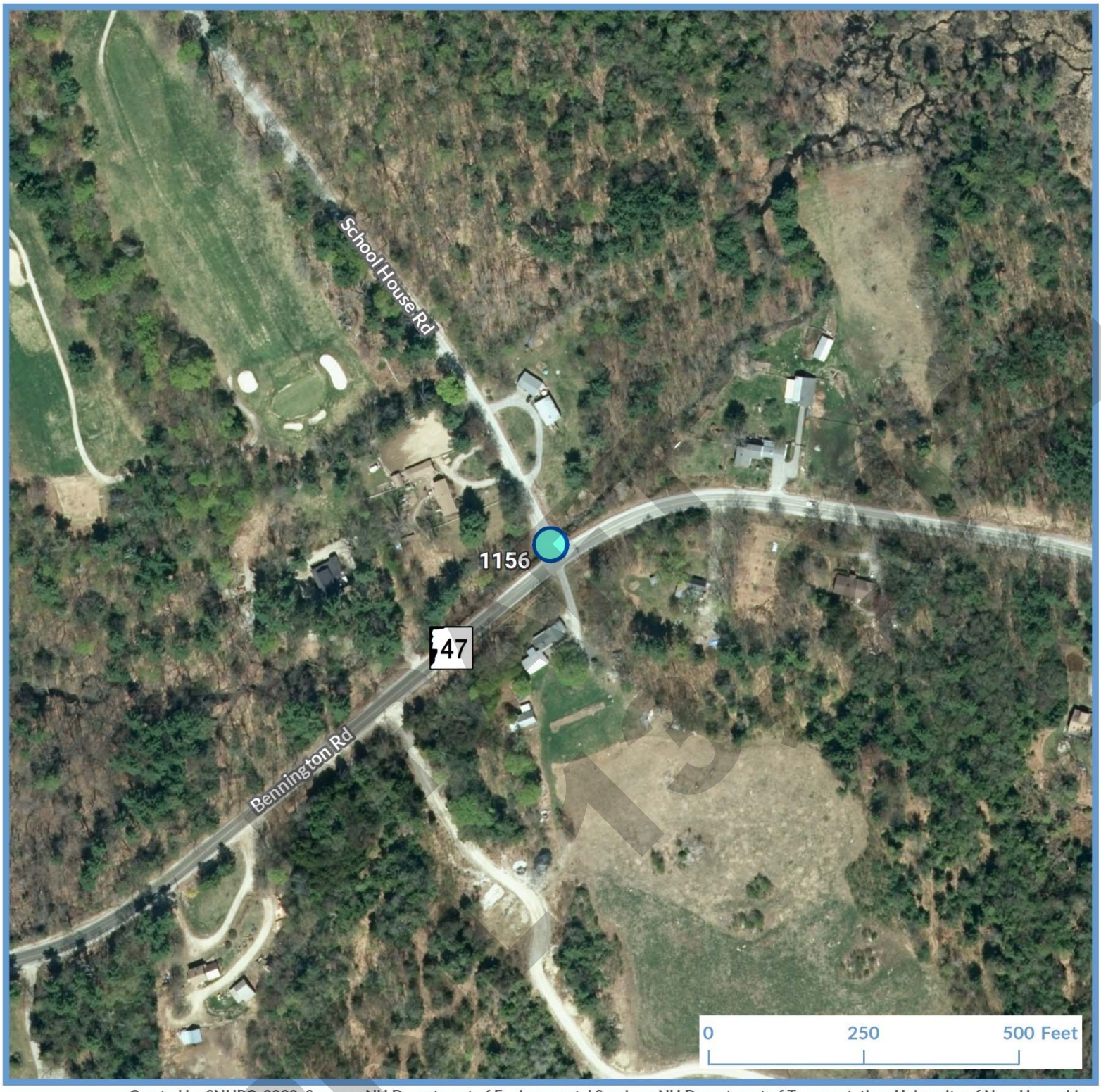
SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
1156	AADT<5,000	2	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	22
15247	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	21
1158	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	21
5272	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	19
1120	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	Yes	2	19
1183	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	18
1163	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	18
1179	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	17
5266	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	16
1126	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Overtop	5	Metal	2	No	0	16
1125	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	16
9470	AADT<5,000	2	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	15
1150	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	15
1180	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	Yes	2	14
1189	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	14
1161	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	12
1121	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	12
801	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	12
1122	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	11
1181	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	10
1185	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	10
1147	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	10
1117	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	10
1166	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	Yes	2	9
5261	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
5260	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
1175	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
1174	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
22	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	8
9417	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1182	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1177	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1176	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1162	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1160	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1157	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1153	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1152	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1123	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1184	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	7
1154	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	7
1186	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	7
5267	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
9418	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5

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Prioritization Results: Town of Francestown

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
1155	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1148	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1119	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
9416	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1188	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
1187	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1172	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
1165	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
1159	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1151	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
1149	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1118	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	5
802	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
5265	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
9459	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9427	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5273	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1178	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1164	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1124	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
1116	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
803	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0

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Francestown, NH		Stream Crossing Detail Sheet			SADES ID 1156
Prioritization Score	**22**	**Traffic Volume**	**<5,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**School House Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Dinsmore Brook**
		Flood Zone Category	**Minimal Hazard**	**Structure Type**	**Steel Corrugated Round Culvert**
		Culvert Condition	**Good**	**Crossing Width**	**5.00'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Metal**	**Obstruction**	**Wood**
		Beaver Activity	**No**	**Assessment Date**	**05/23/2012**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020

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Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Francestown, NH		Stream Crossing Detail Sheet			SADES ID 1158
Prioritization Score	**21**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Wetland**
		Asset Manager ID'd	**Yes**	**Road Name**	**2nd NH Turnpike**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Dinsmore Brook**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Aluminum Corr. Round Culvert**
		Culvert Condition	**Good**	**Crossing Width**	**1.25'**
		10-Yr Hydraulic Vuln.	**Not Applicable**	**Open Height**	**No Data**
		Crossing Material	**Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**06/01/2012**

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Detail Sheet Created: January 17, 2020

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Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Francestown, NH		Stream Crossing Detail Sheet			SADES ID 15247
Prioritization Score	**21**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Wetland**
		Asset Manager ID'd	**Yes**	**Road Name**	**Poor Farm Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Data**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Steel Corrugated Round Culvert**
		Culvert Condition	**Good**	**Crossing Width**	**12.50'**
		10-Yr Hydraulic Vuln.	**Not Applicable**	**Open Height**	**8.50'**
		Crossing Material	**Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**08/05/2019**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020

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Prioritization Score Statistical Summary: Francestown

Traffic Volumes

Count	Totals
AADT>=30,000	0
AADT<30,000	0
AADT<20,000	0
AADT<10,000	0
AADT<5,000	18
AADT<1,000	48
TOTAL:	66

10-Yr Vulnerability

Category	Count
Overtop	1
Vulnerable	1
Unknown	41
Pass	1
Not Applicable	22
TOTAL:	66

Beaver Activity

Yes	4
No	62
TOTAL:	66

Total Crossings

Region	1522
Town	66

Flood Zone

Count	Totals
Floodway	0
100-Year Flood Zone	14
500-Year Flood Zone	0
Minimal Hazard	52
TOTAL:	66

Structure Material

Metal	26
Not Metal	40
TOTAL:	66

Flood Hazard

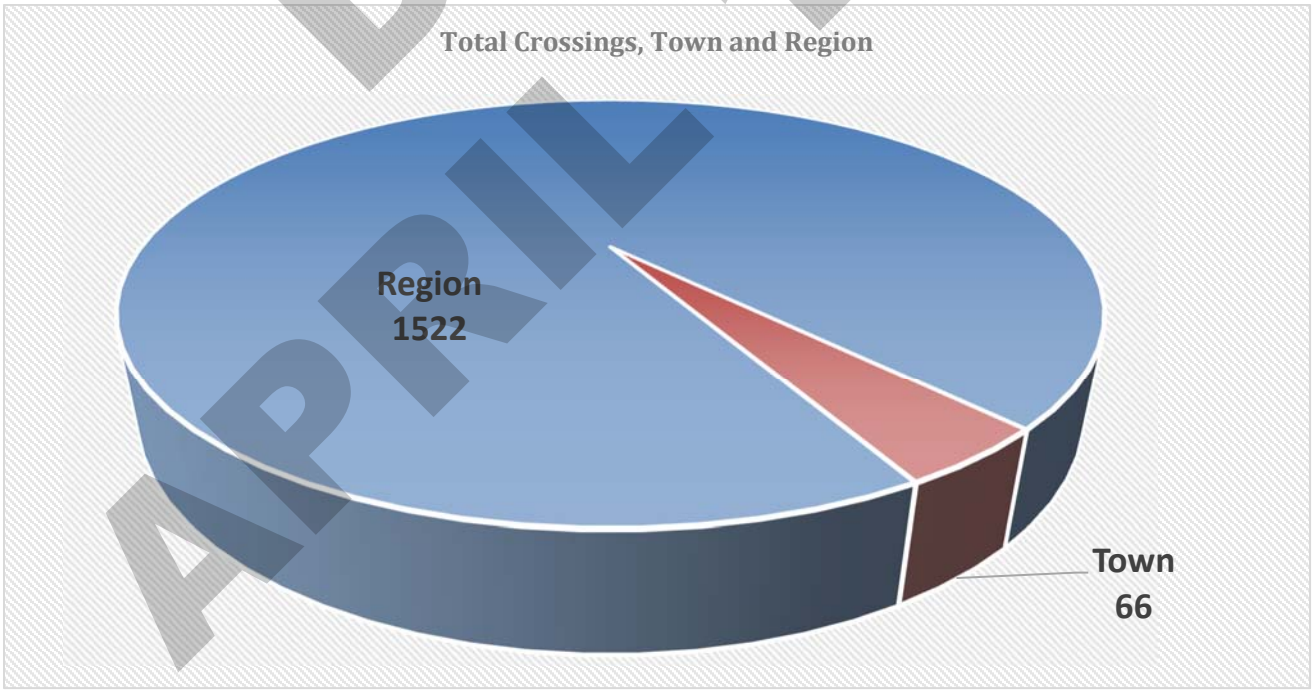
ID'd	39
Not ID'd	27
TOTAL:	66

Culvert Condition

Poor	1
Fair	0
Good	65
Unknown	0
TOTAL:	66

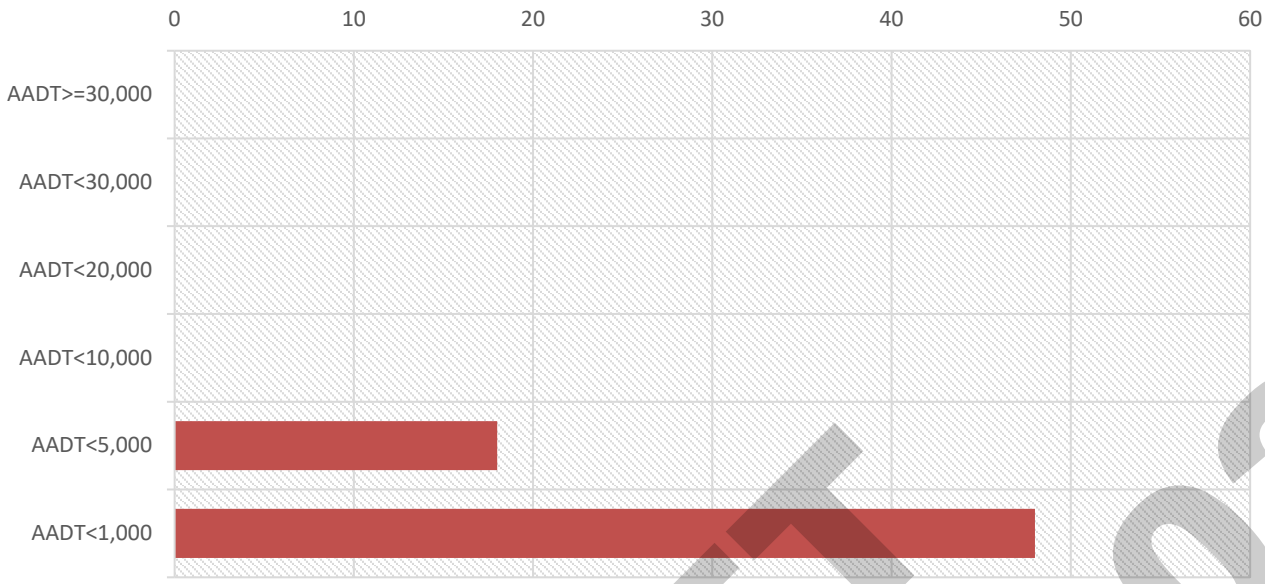
Asset Manager

ID'd	11
Not ID'd	55
TOTAL:	66

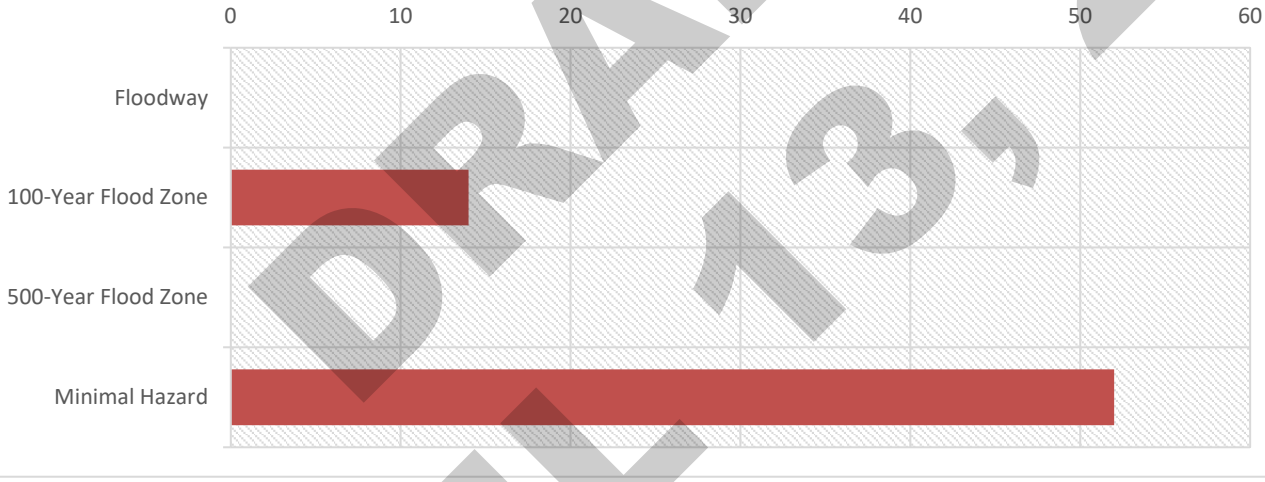


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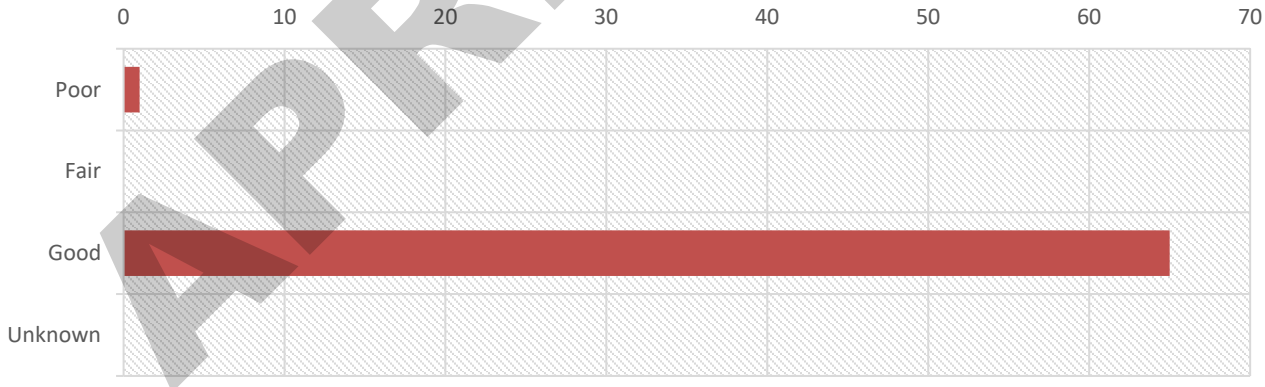
Muni. Count by Traffic Volume Category



Muni. Count by FEMA Flood Zone Categorey

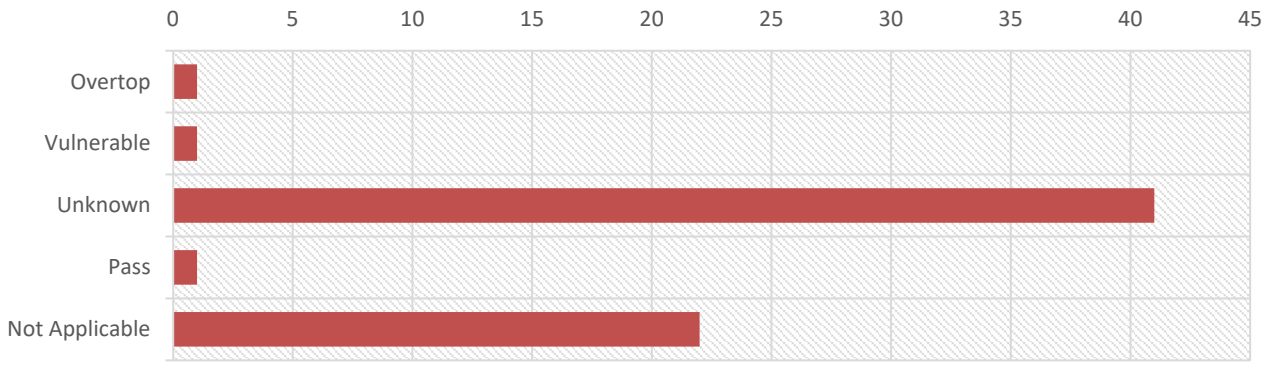


Muni. Count by Stream Crossing Condition

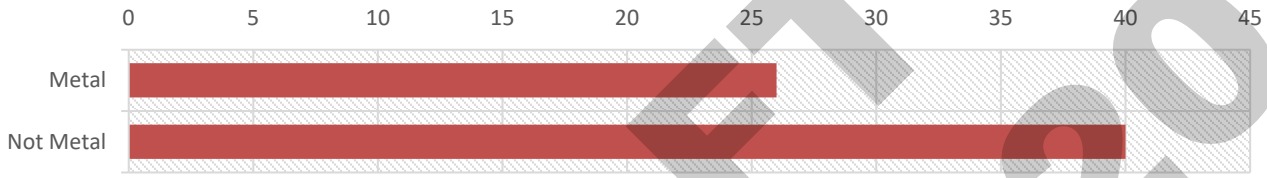


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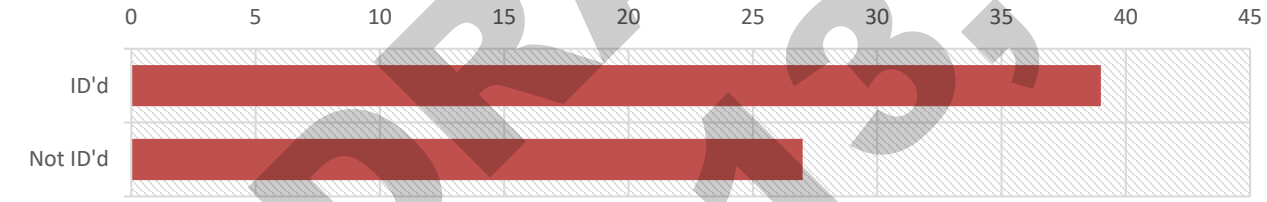
Muni. Count by 10-Yr Vulnerability



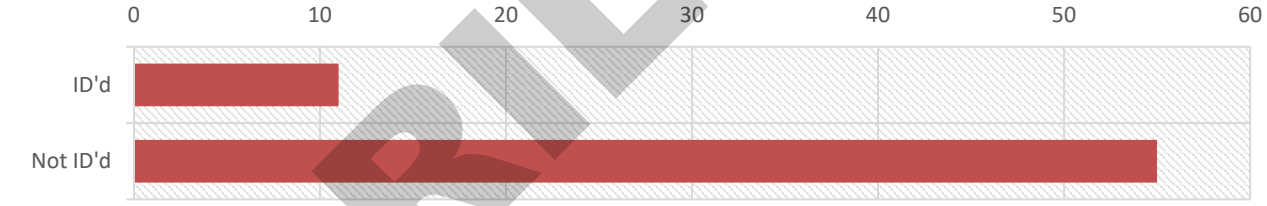
Muni. Count By Structure Material



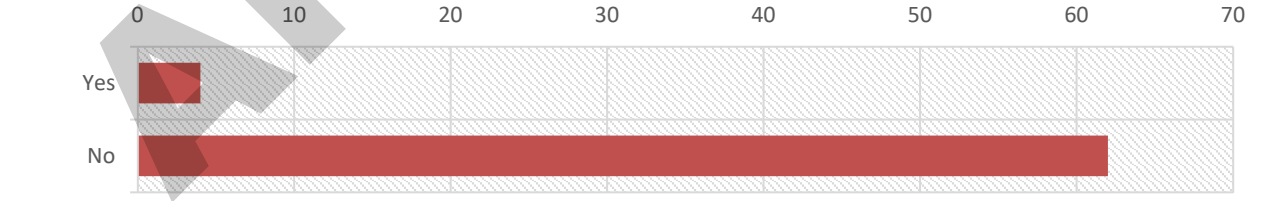
Muni. Count by Identified Flood Hazard History



Muni. Count by Asset Manager Identification



Total Region Count by Beaver Activity



DRAFT 2020
APRIL 13

Prioritization Results: Town of Goffstown

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
5190	AADT<20,000	6	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	28
999849	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	23
5191	AADT<1,000	0	Yes	10	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	23
1035	AADT<1,000	0	Yes	10	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	23
1034	AADT<1,000	0	Yes	10	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	23
8911	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	22
999848	AADT<1,000	0	Yes	10	No	0	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	21
4869	AADT<20,000	6	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	20
5194	AADT<10,000	4	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Metal	2	No	0	19
4880	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Poor	10	Not Applicable	0	Metal	2	Yes	2	19
4874	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	19
999850	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
1056	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	18
1040	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	18
8982	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Overtop	5	Metal	2	No	0	17
5269	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	16
999863	AADT<1,000	0	No	0	Yes	5	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	16
1057	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	15
8916	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	15
5250	AADT<10,000	4	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	14
1252	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	14
8910	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14
5270	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14
5222	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14
5221	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14
4887	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	14
4877	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	14
770	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	13
9429	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	13
5229	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	13
5227	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	13
773	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	13
4882	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	12
1033	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	12
771	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	12
14437	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	12
999862	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
5268	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
5233	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
5232	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
5230	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
4879	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
9447	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	11
1041	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	11

DRAFT 2020

Prioritization Results: Town of Goffstown

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
8909	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	11
4876	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	11
5231	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	10
5228	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	10
5193	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	10
1010	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	10
12965	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	10
8980	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
4870	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
1042	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
5220	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
4885	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
5219	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
1052	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
1051	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
14436	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
14435	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
9430	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
8915	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
8907	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
5234	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
5192	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
4868	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1250	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1055	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1050	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1044	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1043	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
774	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
9446	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
1059	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
1047	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
1046	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
772	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
765	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
1019	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	7
4931	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	7
1030	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
1024	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	Yes	2	7
8912	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	6
4930	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Metal	2	No	0	6
1037	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
775	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
8979	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5

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Prioritization Results: Town of Goffstown

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
5124	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4888	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
4881	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
4875	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
4871	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
4867	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
1053	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	5
1045	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1039	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1027	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1025	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1020	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1008	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
767	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1036	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	4
5123	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
9434	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9433	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
8908	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4928	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4886	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4884	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4883	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4878	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4873	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
4872	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1249	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1248	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1054	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1049	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1038	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1032	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1031	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1029	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1028	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1026	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1023	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1022	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1021	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1011	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
994	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
993	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
992	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
991	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3

DRAFT 1/8/2020

Prioritization Results: Town of Goffstown

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
769	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
766	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9431	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
1048	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
1018	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
8981	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
8914	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
8913	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5122	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
4929	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
1251	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
1009	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
768	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0

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APRIL 13, 2020



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

APPROVED

Goffstown, NH		Stream Crossing Detail Sheet			SADES ID 5190
Prioritization Score	**28**	**Traffic Volume**	**<20,000**	**Crossing Type**	**Stream**
SNHPC **Detail Sheet Created: January 17, 2020**		**Asset Manager ID'd**	**Yes**	**Road Name**	**Route 114 (Mast Road)**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Dan Little Brook**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Box Culvert**
		Culvert Condition	**Good**	**Crossing Width**	**4.70'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**07/11/2013**



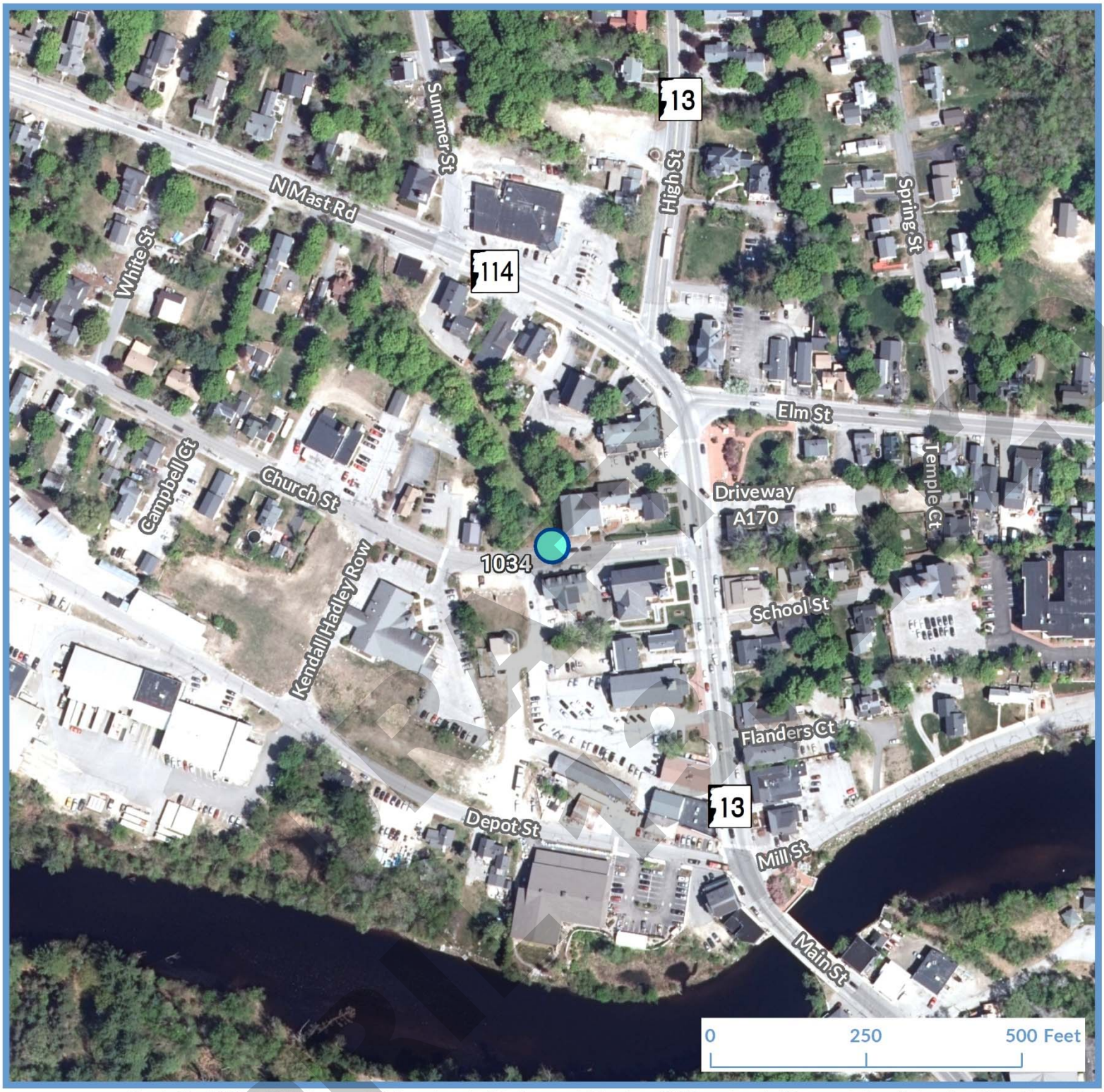
Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Goffstown, NH		Stream Crossing Detail Sheet			SADES ID 5191
Prioritization Score	**23**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Surface**
		Asset Manager ID'd	**Yes**	**Road Name**	**Goffstown Rail Trail**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Dan Little Brook**
		Flood Zone Category	**Floodway**	**Structure Type**	**Concrete Box Culvert**
		Culvert Condition	**Good**	**Crossing Width**	**4.40'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**07/10/2013**

SNHPC

Detail Sheet Created: January 17, 2020

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Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Goffstown, NH		Stream Crossing Detail Sheet			SADES ID 1034
Prioritization Score	**23**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**Church Street**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Piscataquog (Tributary)**
		Flood Zone Category	**Floodway**	**Structure Type**	**Open Bottom Stone Arch**
		Culvert Condition	**Good**	**Crossing Width**	**4.50'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**07/02/2012**

SNHPC

Detail Sheet Created: January 17, 2020

APPROVED



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Goffstown, NH		Stream Crossing Detail Sheet			SADES ID 1035
Prioritization Score	**23**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**Depot Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Piscataquog (Tributary)**
		Flood Zone Category	**Floodway**	**Structure Type**	**Smooth Plastic Round Culvert**
		Culvert Condition	**Good**	**Crossing Width**	**No Data**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**No Data**
		Beaver Activity	**No**	**Assessment Date**	**07/02/2012**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020

APPROVED

Prioritization Score Statistical Summary: Goffstown

Traffic Volumes

Count	Totals
AADT>=30,000	0
AADT<30,000	0
AADT<20,000	6
AADT<10,000	15
AADT<5,000	23
AADT<1,000	100
TOTAL:	144

10-Yr Vulnerability

Category	Count
Overtop	8
Vulnerable	3
Unknown	111
Pass	2
Not Applicable	20
TOTAL:	144

Beaver Activity

Yes	5
No	139
TOTAL:	144

Total Crossings

Region	1443
Town	144

Flood Zone

Count	Totals
Floodway	13
100-Year Flood Zone	26
500-Year Flood Zone	2
Minimal Hazard	103
TOTAL:	144

Structure Material

Metal	27
Not Metal	117
TOTAL:	144

Flood Hazard

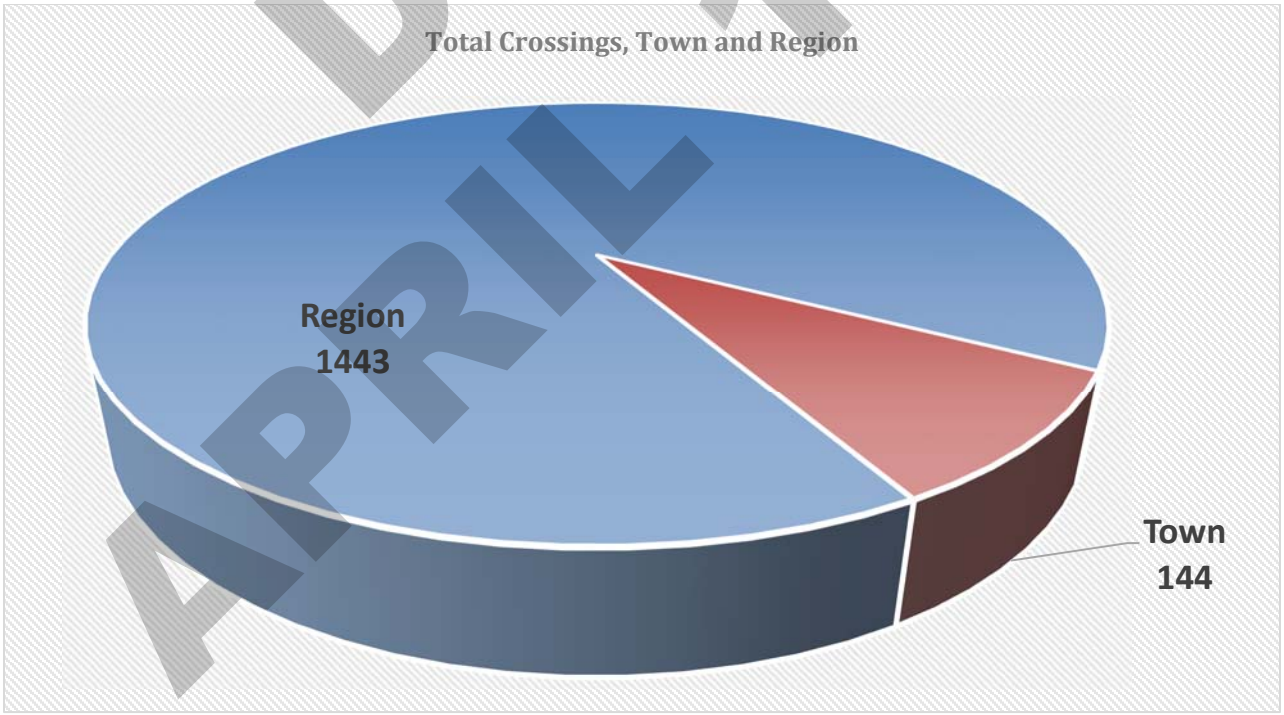
ID'd	52
Not ID'd	92
TOTAL:	144

Culvert Condition

Poor	3
Fair	5
Good	131
Unknown	5
TOTAL:	144

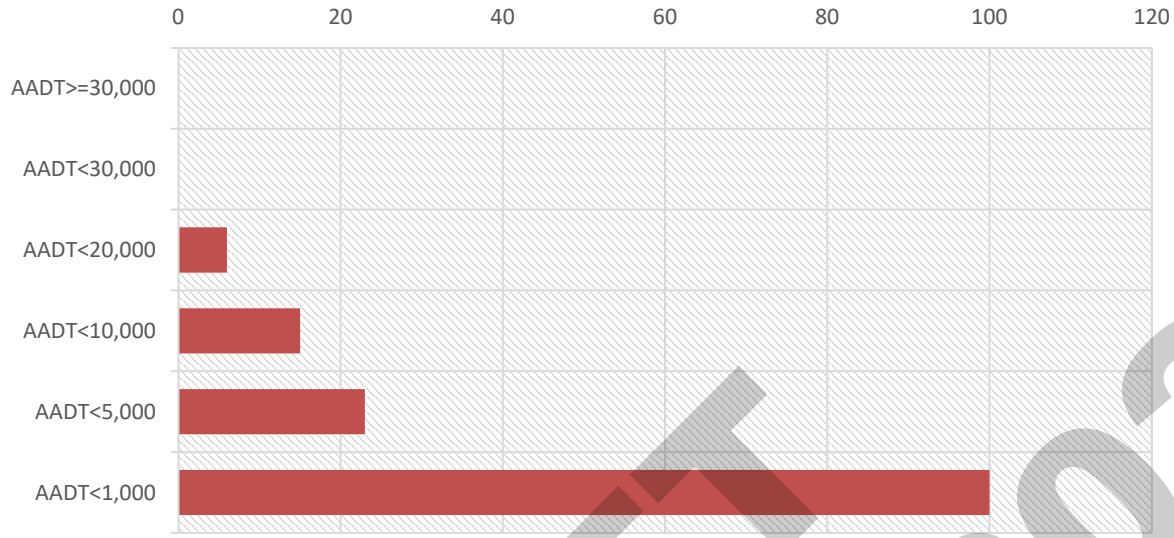
Asset Manager

ID'd	9
Not ID'd	135
TOTAL:	144

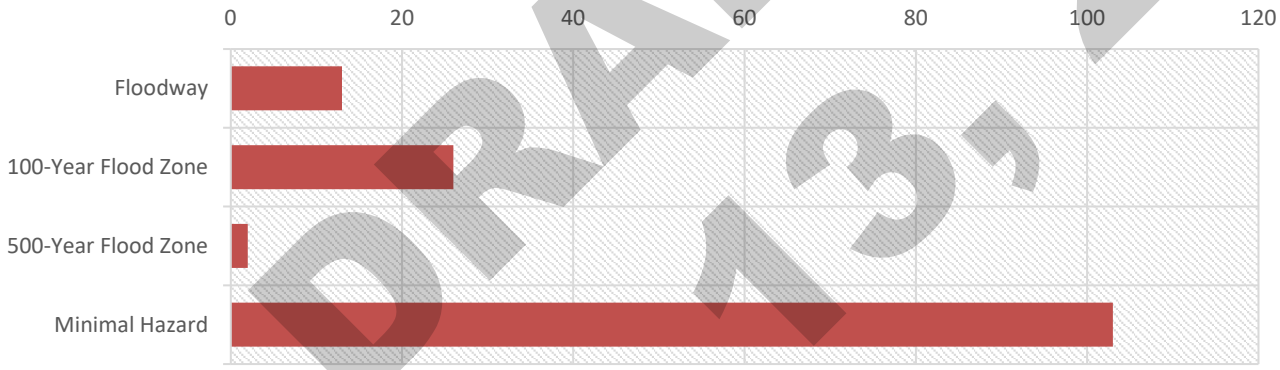


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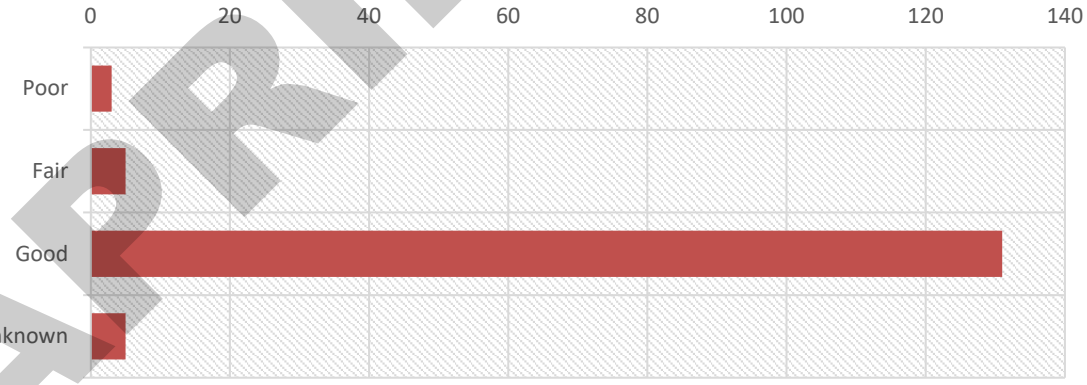
Muni. Count by Traffic Volume Category



Muni. Count by FEMA Flood Zone Categorey

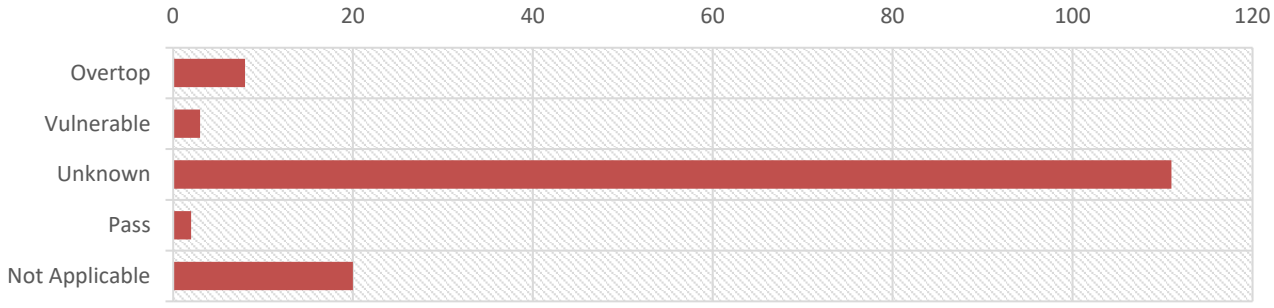


Muni. Count by Stream Crossing Condition

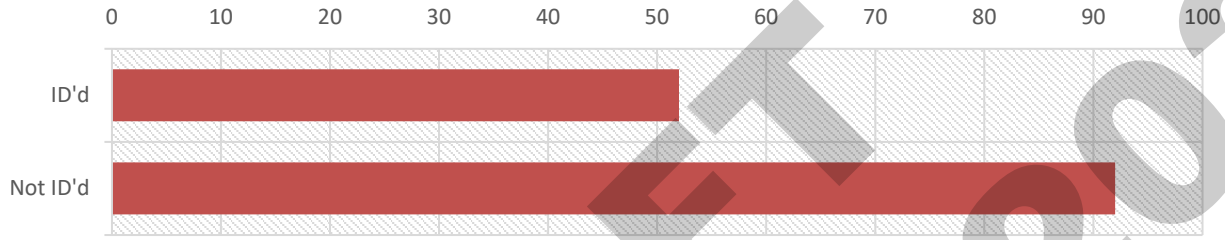


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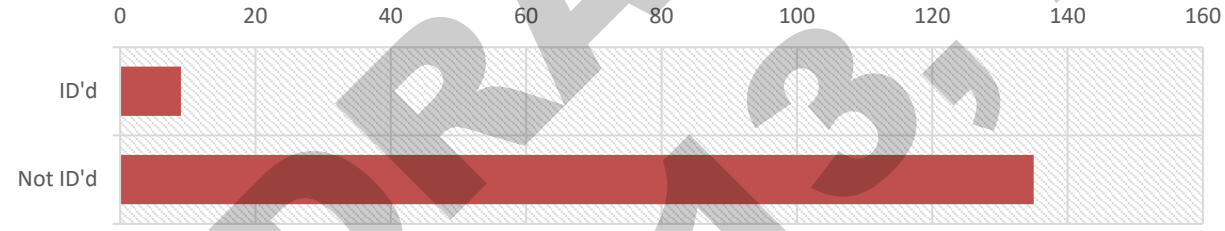
Muni. Count by 10-Yr Vulnerability



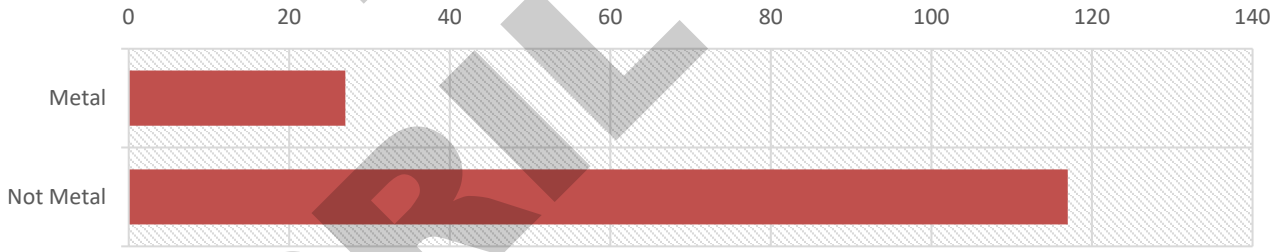
Muni. Count by Identified Flood Hazard History



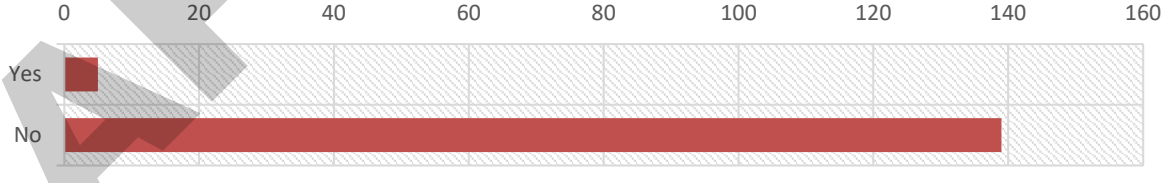
Muni. Count by Asset Manager Identification



Muni. Count By Structure Material



Total Region Count by Beaver Activity



DRAFT 2020
APRIL 13,

Prioritization Results: Town of Hooksett

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
15109	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Fair	5	Vulnerable	4	Not Metal	0	No	0	28
999969	AADT>=30,000	10	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	27
10248	AADT<30,000	8	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Overtop	5	Not Metal	0	No	0	27
15110	AADT<20,000	6	Yes	10	No	0	100-Year Flood Zone	4	Fair	5	Pass	0	Not Metal	0	No	0	25
10887	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Vulnerable	4	Not Metal	0	No	0	25
12549	AADT<30,000	8	No	0	Yes	5	500-Year Flood Zone	3	Fair	5	Unknown	3	Not Metal	0	No	0	24
10408	AADT<30,000	8	No	0	Yes	5	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	24
12608	AADT<20,000	6	No	0	Yes	5	500-Year Flood Zone	3	Fair	5	Unknown	3	Not Metal	0	No	0	22
10209	AADT<20,000	6	No	0	Yes	5	500-Year Flood Zone	3	Fair	5	Unknown	3	Not Metal	0	No	0	22
999925	AADT<10,000	4	No	0	Yes	5	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	22
10249	AADT<20,000	6	No	0	Yes	5	Floodway	5	Fair	5	Pass	0	Not Metal	0	No	0	21
10933	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	Yes	2	21
10938	AADT<20,000	6	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Pass	0	Not Metal	0	No	0	20
10252	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Fair	5	Vulnerable	4	Metal	2	No	0	20
999889	AADT<20,000	6	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	19
10401	AADT<20,000	6	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	19
12606	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	19
12552	AADT<5,000	2	No	0	Yes	5	500-Year Flood Zone	3	Fair	5	Vulnerable	4	Not Metal	0	No	0	19
10324	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	19
15108	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	19
999979	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
999869	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
12704	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	17
10211	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Fair	5	Overtop	5	Not Metal	0	No	0	17
12551	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Fair	5	Overtop	5	Not Metal	0	No	0	17
999876	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	17
228	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	Yes	2	16
999923	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	15
10894	AADT<5,000	2	No	0	No	0	500-Year Flood Zone	3	Fair	5	Overtop	5	Not Metal	0	No	0	15
10889	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Overtop	5	Not Metal	0	No	0	15
10251	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	15
999932	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	14
999931	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	14
999930	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	14
999926	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	14
999922	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	14
1363	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14
11097	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	14
10253	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Fair	5	Pass	0	Metal	2	No	0	13
999882	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	13
10939	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	13
10323	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
10250	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	13
10886	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	12

DRAFT 8/3/20

Prioritization Results: Town of Hooksett

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
999924	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
10935	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Good	0	Overtop	5	Not Metal	0	No	0	12
10210	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	12
999981	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
10325	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	12
11098	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	11
11096	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Fair	5	Pass	0	Not Metal	0	No	0	11
10893	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Vulnerable	4	Not Metal	0	No	0	11
999986	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	11
999936	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	11
15111	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Not Applicable	0	Not Metal	0	No	0	10
10891	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Not Metal	0	No	0	10
10247	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Overtop	5	Not Metal	0	No	0	10
10934	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	9
10937	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Pass	0	Not Metal	0	No	0	9
10936	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	9
11099	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	8
999996	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999976	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999935	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999934	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999933	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999892	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999859	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999852	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
10932	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Metal	2	No	0	7
549	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
2881	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	4
10892	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
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APRIL 2020



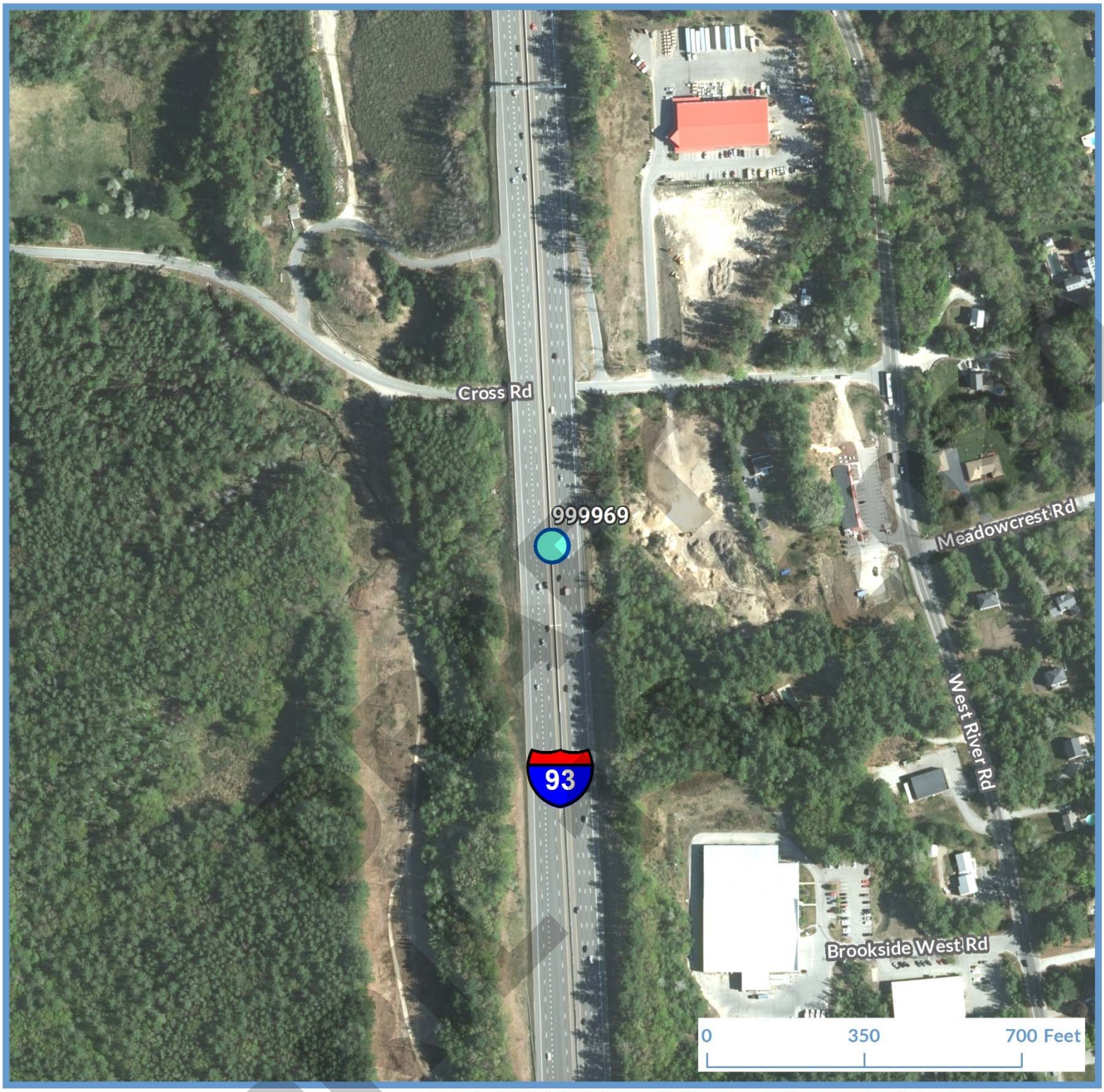
Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Hooksett, NH		Stream Crossing Detail Sheet			SADES ID 15109
Prioritization Score	**28**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**Vindale Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Data**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Concrete Round Culvert**
		Culvert Condition	**Fair**	**Crossing Width**	**4.30'**
		10-Yr Hydraulic Vuln.	**Vulnerable**	**Open Height**	**4.30'**
		Crossing Material	**Not Metal**	**Obstruction**	**Wood**
		Beaver Activity	**No**	**Assessment Date**	**07/26/2019**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020

API



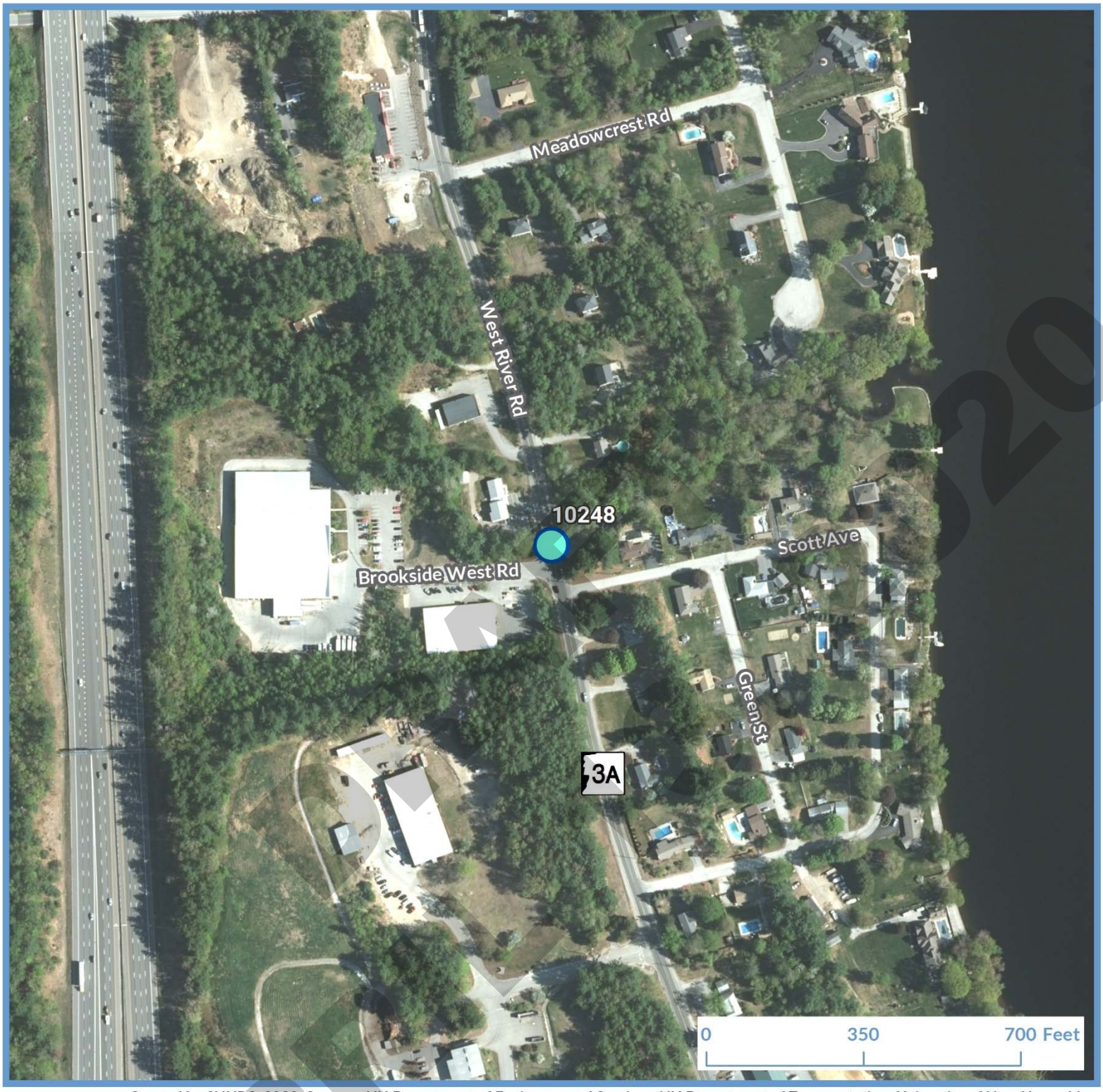
Created by SNHPC, 2020. Sources: NH Department of Transportation; University of New Hampshire.

Hooksett, NH		Stream Crossing Detail Sheet			SADES ID 999969
Prioritization Score	**27**	**Traffic Volume**	**<30,000**	**Crossing Type**	**No Data**
		Asset Manager ID'd	**No**	**Road Name**	**Interstate 93**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Data**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**No Data**
		Culvert Condition	**Unknown**	**Crossing Width**	**No Data**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**No Data**
		Beaver Activity	**No**	**Assessment Date**	**No Yet Surveyed**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020

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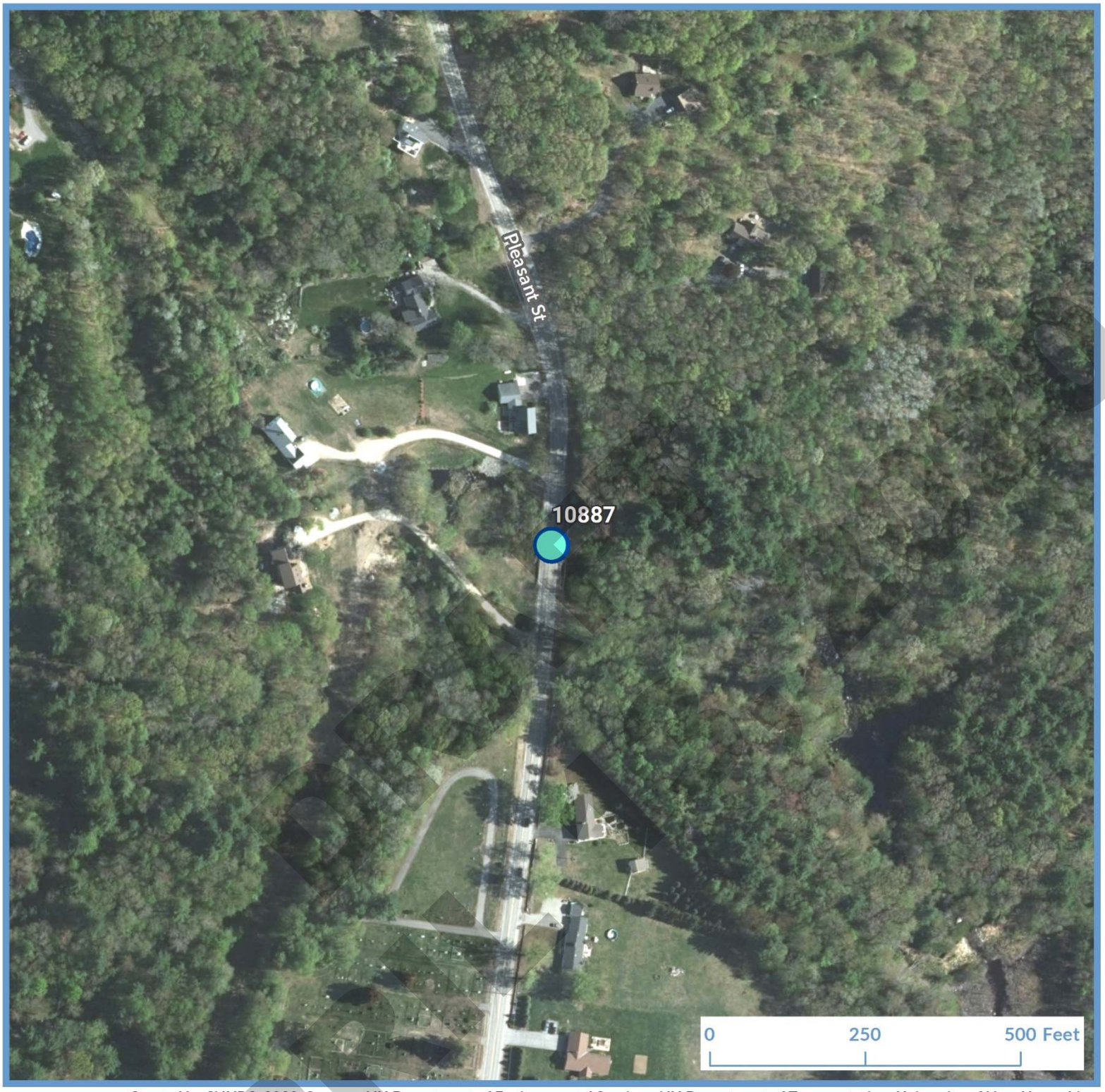
APRIL 2020

Hooksett, NH		Stream Crossing Detail Sheet			SADES ID 10248
Prioritization Score	**27**	**Traffic Volume**	**<30,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**No**	**Road Name**	**Route 3A (West River Road)**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Data**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Concrete Round Culvert**
		Culvert Condition	**Fair**	**Crossing Width**	**4.00'**
		10-Yr Hydraulic Vuln.	**Overtop**	**Open Height**	**4.00'**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**12/04/2017**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION

SNHPC

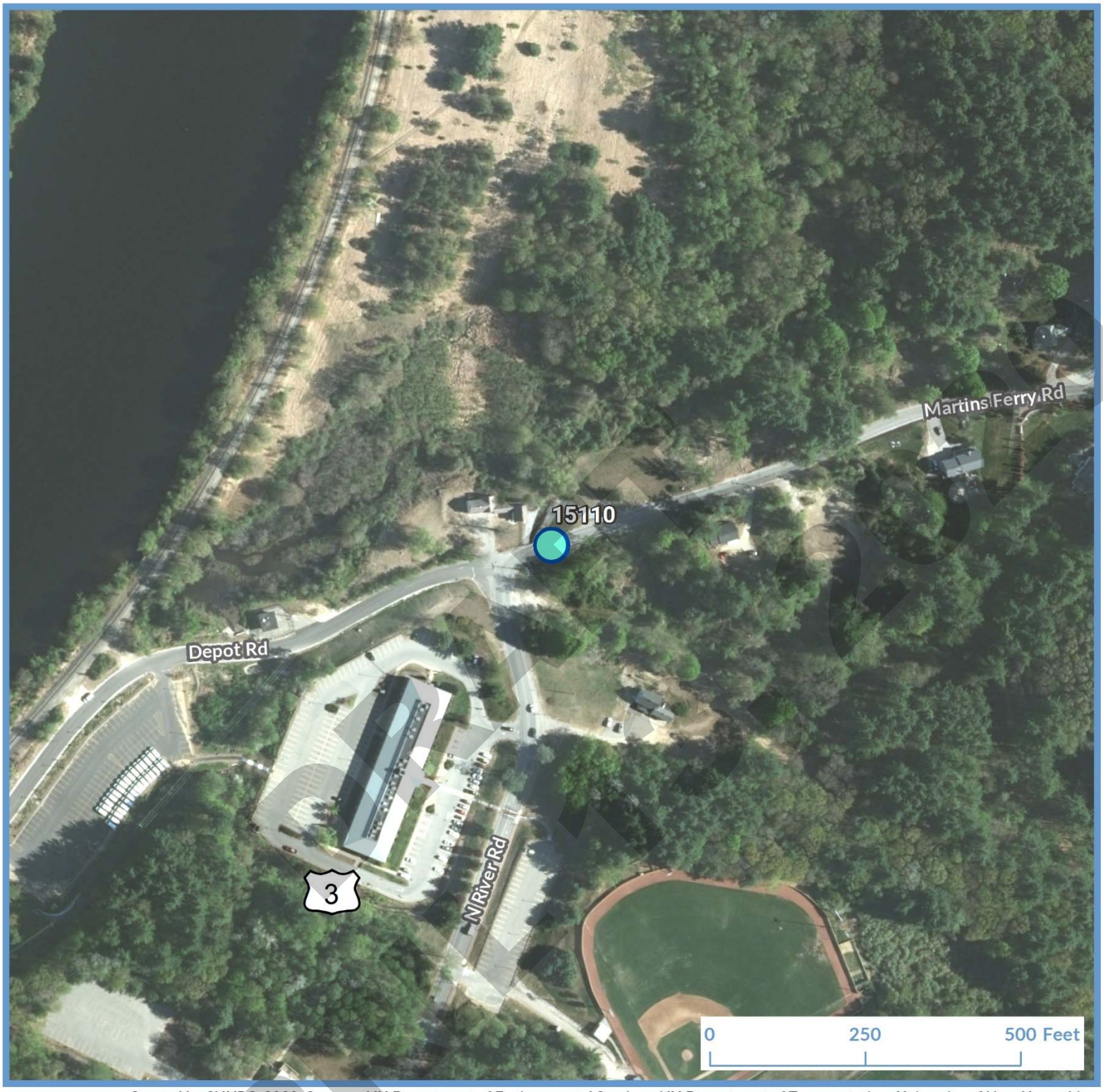
Detail Sheet Created: January 17, 2020



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Hooksett, NH		Stream Crossing Detail Sheet			SADES ID 10887
Prioritization Score	**25**	**Traffic Volume**	**<5,000**	**Crossing Type**	**Stream**
SNHPC		**Asset Manager ID'd**	**No**	**Road Name**	**Pleasant Street**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Data**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Concrete Box Culvert**
		Culvert Condition	**Poor**	**Crossing Width**	**5.00'**
		10-Yr Hydraulic Vuln.	**Vulnerable**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
Detail Sheet Created: January 17, 2020		**Beaver Activity**	**No**	**Assessment Date**	**05/30/2018**

APPROVED



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Hooksett, NH		Stream Crossing Detail Sheet			SADES ID 15110
Prioritization Score	**25**	**Traffic Volume**	**<20,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**Martins Ferry Road**
		Flood Hazard ID'd	**No**	**Stream Name**	**No Data**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Stone and Concrete Box Culvert**
		Culvert Condition	**Fair**	**Crossing Width**	**7.50'**
		10-Yr Hydraulic Vuln.	**Pass**	**Open Height**	**9.60'**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**07/26/2019**

SNHPC

Detail Sheet Created: January 17, 2020

APPROVED

Prioritization Score Statistical Summary: Town of Hooksett

Traffic Volumes

Count	Totals
AADT>=30,000	3
AADT<30,000	3
AADT<20,000	13
AADT<10,000	12
AADT<5,000	11
AADT<1,000	32
TOTAL:	74

10-Yr Vulnerability

Category	Count
Overtop	7
Vulnerable	6
Unknown	44
Pass	7
Not Applicable	10
TOTAL:	74

Beaver Activity

Yes	3
No	71
TOTAL:	74

Total Crossings

Region	1514
Town	74

Flood Zone

Count	Totals
Floodway	7
100-Year Flood Zone	22
500-Year Flood Zone	11
Minimal Hazard	34
TOTAL:	74

Structure Material

Metal	5
Not Metal	69
TOTAL:	74

Flood Hazard

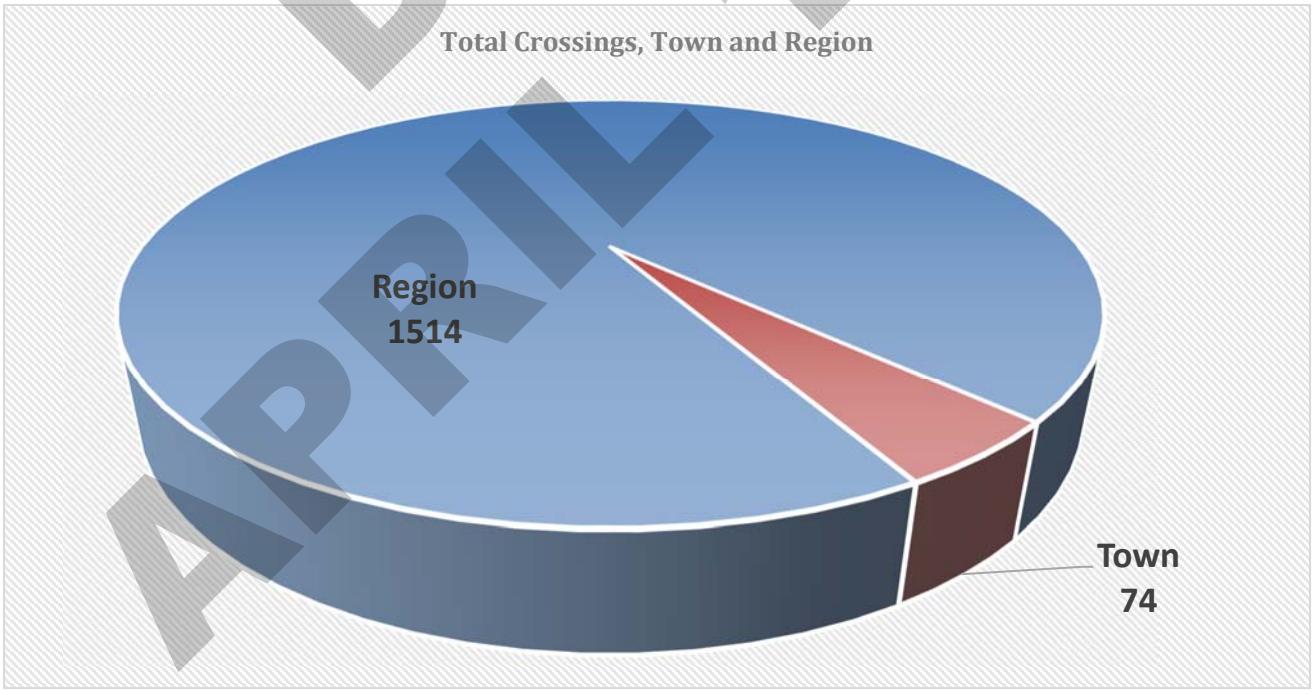
ID'd	25
Not ID'd	49
TOTAL:	74

Culvert Condition

Poor	5
Fair	31
Good	10
Unknown	28
TOTAL:	74

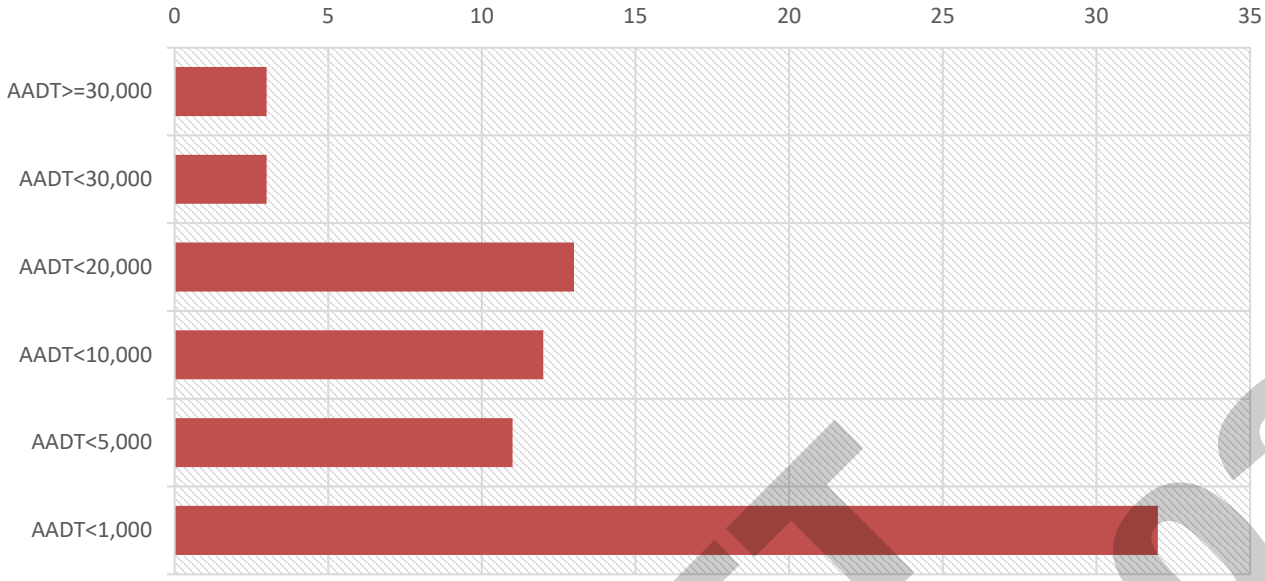
Asset Manager

ID'd	3
Not ID'd	71
TOTAL:	74



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APRIL 13, 2020

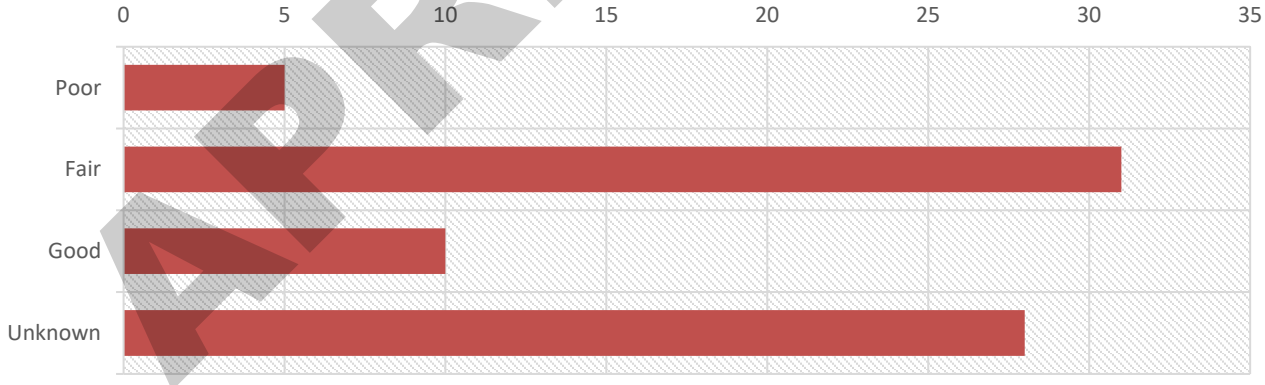
Muni. Count by Traffic Volume Category



Muni. Count by FEMA Flood Zone Categorey

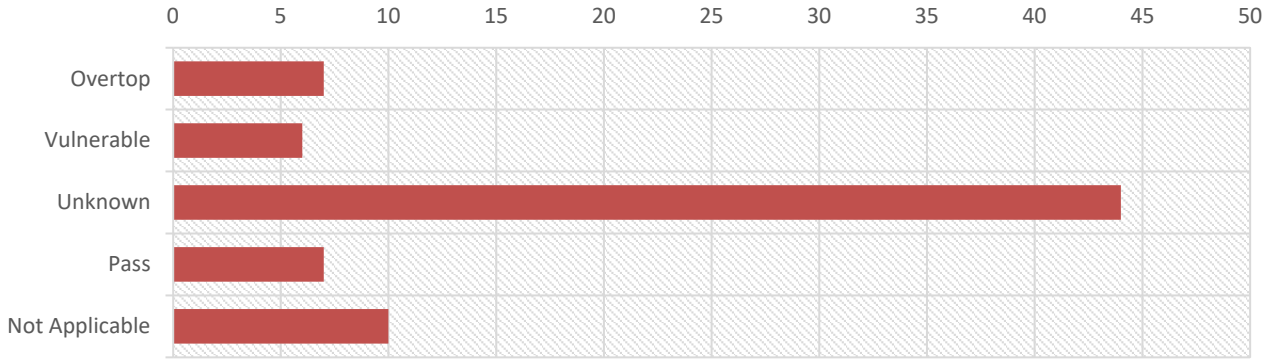


Muni. Count by Stream Crossing Condition

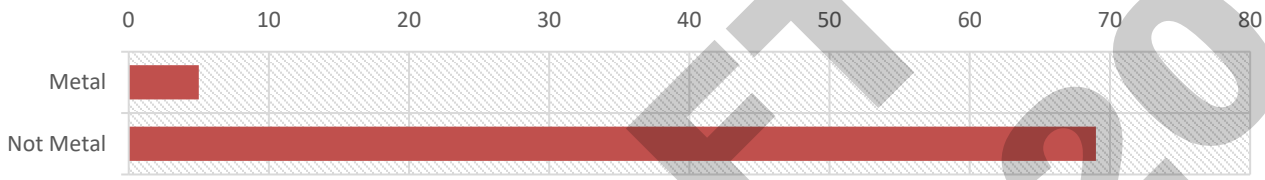


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APRIL 13, 2020

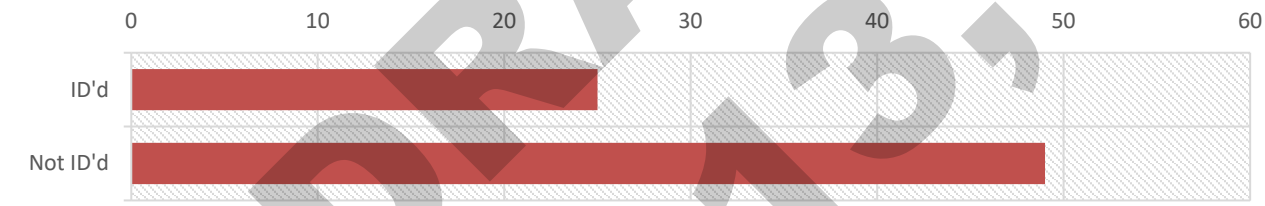
Muni. Count by 10-Yr Vulnerability



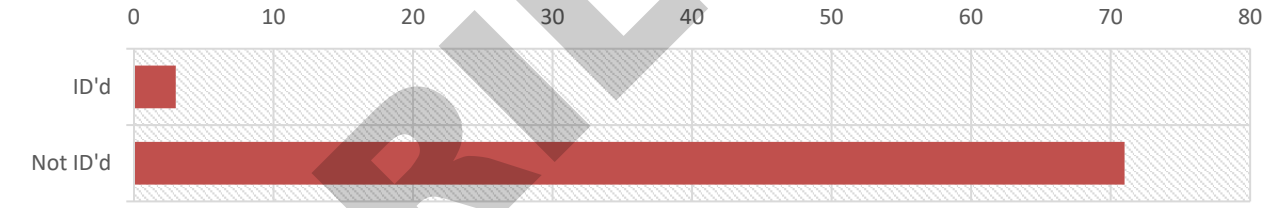
Muni. Count By Structure Material



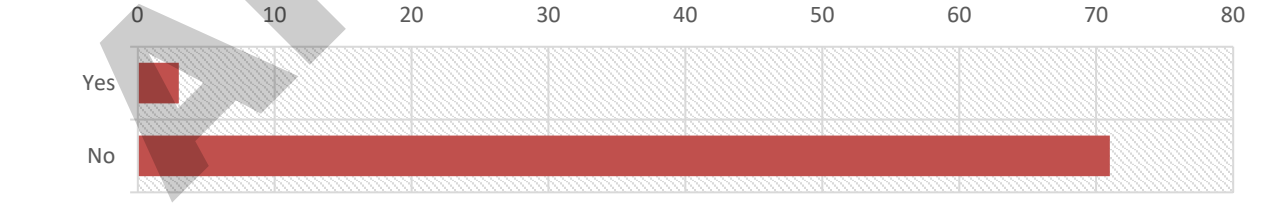
Muni. Count by Identified Flood Hazard History



Muni. Count by Asset Manager Identification



Total Region Count by Beaver Activity



DRAFT APRIL 13, 2020

Prioritization Results: Town of Londonderry

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
5927	AADT<20,000	6	No	0	Yes	5	Floodway	5	Poor	10	Overtop	5	Metal	2	No	0	33
5877	AADT<5,000	2	Yes	10	No	0	Minimal Hazard	0	Poor	10	Overtop	5	Metal	2	No	0	29
5926	AADT<20,000	6	No	0	Yes	5	Floodway	5	Fair	5	Overtop	5	Metal	2	No	0	28
5930	AADT<20,000	6	No	0	Yes	5	Floodway	5	Fair	5	Vulnerable	4	Metal	2	No	0	27
6770	AADT<10,000	4	Yes	10	No	0	Floodway	5	Fair	5	Pass	0	Metal	2	No	0	26
10300	AADT<20,000	6	No	0	Yes	5	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	24
230	AADT<20,000	6	No	0	No	0	Floodway	5	Poor	10	Unknown	3	Not Metal	0	No	0	24
999964	AADT<1,000	0	Yes	10	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	23
12540	AADT<20,000	6	No	0	No	0	500-Year Flood Zone	3	Poor	10	Not Applicable	0	Metal	2	No	0	21
232	AADT<20,000	6	No	0	No	0	Floodway	5	Fair	5	Unknown	3	Metal	2	No	0	21
999937	AADT<5,000	2	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	20
6839	AADT<5,000	2	Yes	10	No	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	20
12530	AADT<1,000	0	No	0	No	0	Floodway	5	Poor	10	Unknown	3	Metal	2	No	0	20
10299	AADT<1,000	0	No	0	Yes	5	Floodway	5	Poor	10	Not Applicable	0	Not Metal	0	No	0	20
6127	AADT<1,000	0	No	0	No	0	Floodway	5	Poor	10	Unknown	3	Metal	2	No	0	20
6674	AADT<20,000	6	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	19
6260	AADT<20,000	6	No	0	No	0	Floodway	5	Fair	5	Unknown	3	Not Metal	0	No	0	19
231	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	19
5876	AADT<5,000	2	Yes	10	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	19
999990	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
999983	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
999974	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
10387	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
10417	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	18
6545	AADT<20,000	6	No	0	No	0	Floodway	5	Fair	5	Not Applicable	0	Not Metal	0	Yes	2	18
999939	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
999938	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
999958	AADT<10,000	4	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	17
999946	AADT<10,000	4	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	17
6124	AADT<10,000	4	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	17
5761	AADT<10,000	4	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	17
6223	AADT<30,000	8	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	16
12699	AADT<20,000	6	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	16
6130	AADT<30,000	8	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	15
6592	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	15
15383	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Unknown	3	Not Metal	0	Yes	2	15
10302	AADT<1,000	0	No	0	No	0	Floodway	5	Poor	10	Not Applicable	0	Not Metal	0	No	0	15
6227	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
5819	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
999978	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	14
5826	AADT<20,000	6	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	14
5757	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	Yes	2	14
1366	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Unknown	3	Metal	2	No	0	14
5771	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Metal	2	No	0	13

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Prioritization Results: Town of Londonderry

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
404	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	13
7230	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	13
7229	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	13
999991	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	13
999899	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	13
999877	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	13
999868	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	13
999857	AADT<1,000	0	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	13
14580	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Unknown	3	Not Metal	0	No	0	13
10317	AADT<1,000	0	No	0	No	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	13
6699	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Metal	2	Yes	2	13
5825	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Unknown	3	Not Metal	0	No	0	13
5821	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
5820	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Unknown	3	Not Metal	0	No	0	13
5770	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
999884	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999864	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
5769	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	12
1350	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	12
5925	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	12
5923	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Not Metal	0	No	0	12
999851	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
12529	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Pass	0	Metal	2	No	0	12
6673	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Pass	0	Metal	2	No	0	12
6597	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Metal	2	No	0	12
999893	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	11
1369	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Not Metal	0	No	0	10
999890	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
6702	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	10
14554	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Not Applicable	0	Not Metal	0	No	0	10
10315	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	10
6228	AADT<1,000	0	No	0	No	0	Floodway	5	Fair	5	Not Applicable	0	Not Metal	0	No	0	10
6128	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Metal	2	No	0	10
6126	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Metal	2	No	0	10
6125	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Metal	2	No	0	10
10423	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
10416	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
10415	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
10414	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
6229	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
2778	AADT<20,000	6	No	0	No	0	500-Year Flood Zone	3	Good	0	Not Applicable	0	Not Metal	0	No	0	9
12545	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	9
6635	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Pass	0	Not Metal	0	No	0	9
12966	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	9

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Prioritization Results: Town of Londonderry

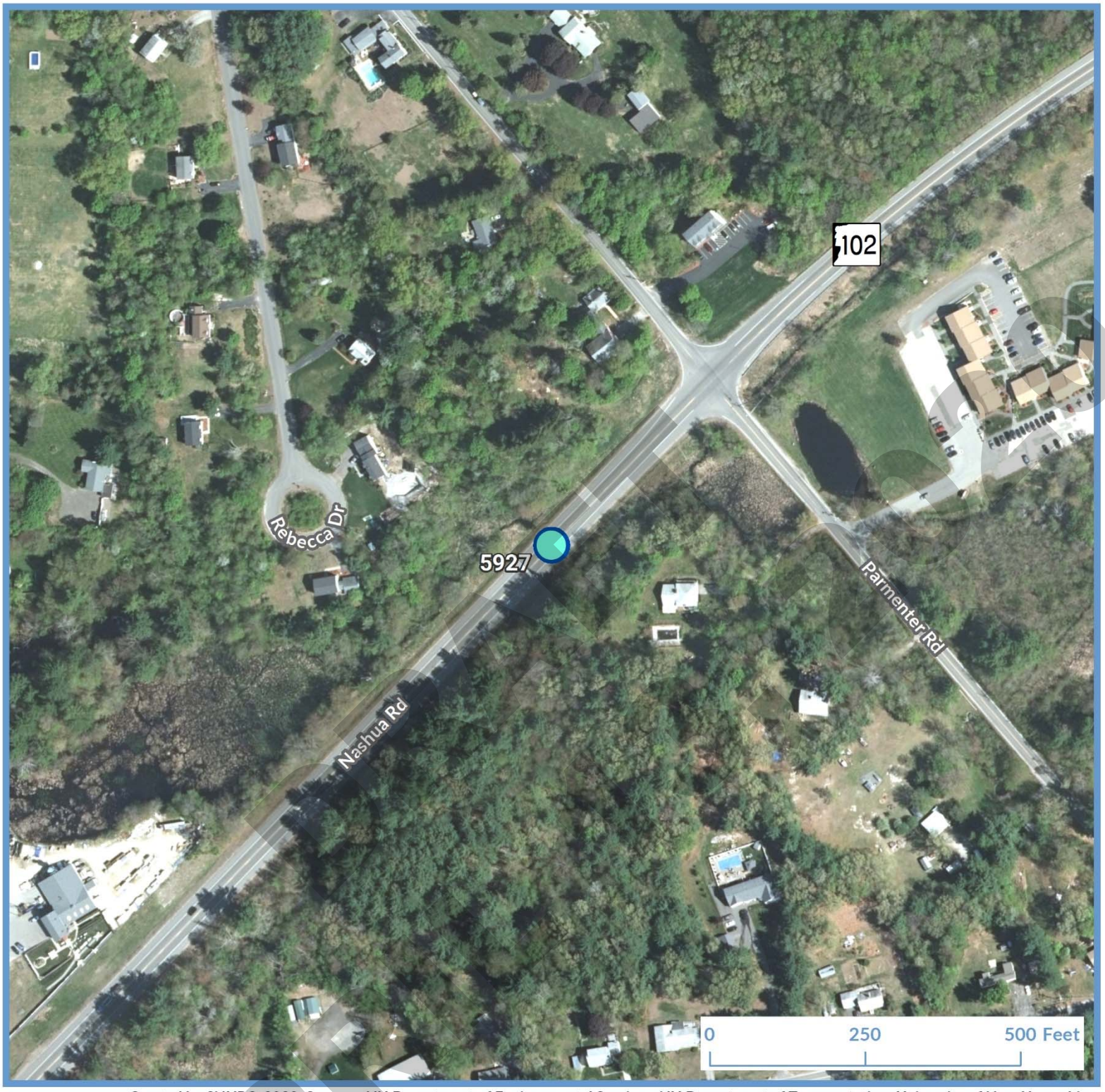
SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
6703	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
10422	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Vulnerable	4	Not Metal	0	No	0	9
6914	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Pass	0	Not Metal	0	No	0	9
10421	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	8
6771	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	8
999872	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999871	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999865	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
12539	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
10316	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
10301	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
10294	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	8
6259	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	8
6225	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	8
6224	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	8
5822	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	8
12541	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Good	0	Pass	0	Not Metal	0	No	0	7
10419	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
6593	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
6637	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	7
6636	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	7
7228	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	7
7227	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	7
6678	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Metal	2	No	0	7
5879	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	Yes	2	7
5878	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Metal	2	No	0	7
5824	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
10298	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	6
12528	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Not Metal	0	No	0	6
6700	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Metal	2	No	0	6
6676	AADT<5,000	2	No	0	No	0	500-Year Flood Zone	3	Good	0	Pass	0	Not Metal	0	No	0	5
6768	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	5
6672	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Not Applicable	0	Metal	2	No	0	5
6638	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
6222	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	5
6129	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	5
5924	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	5
5870	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	5
5753	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Not Applicable	0	Metal	2	No	0	5
6701	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
6679	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	4
6226	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
10413	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
10296	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3

DRAFT 1/15/2020

Prioritization Results: Town of Londonderry

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
10295	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6769	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6675	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Pass	0	Not Metal	0	No	0	3
6594	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5875	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5874	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5873	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5823	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
6698	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
5872	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	Yes	2	2
5871	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Metal	2	No	0	2
7247	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
7246	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6677	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6639	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6596	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
6595	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
5869	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0

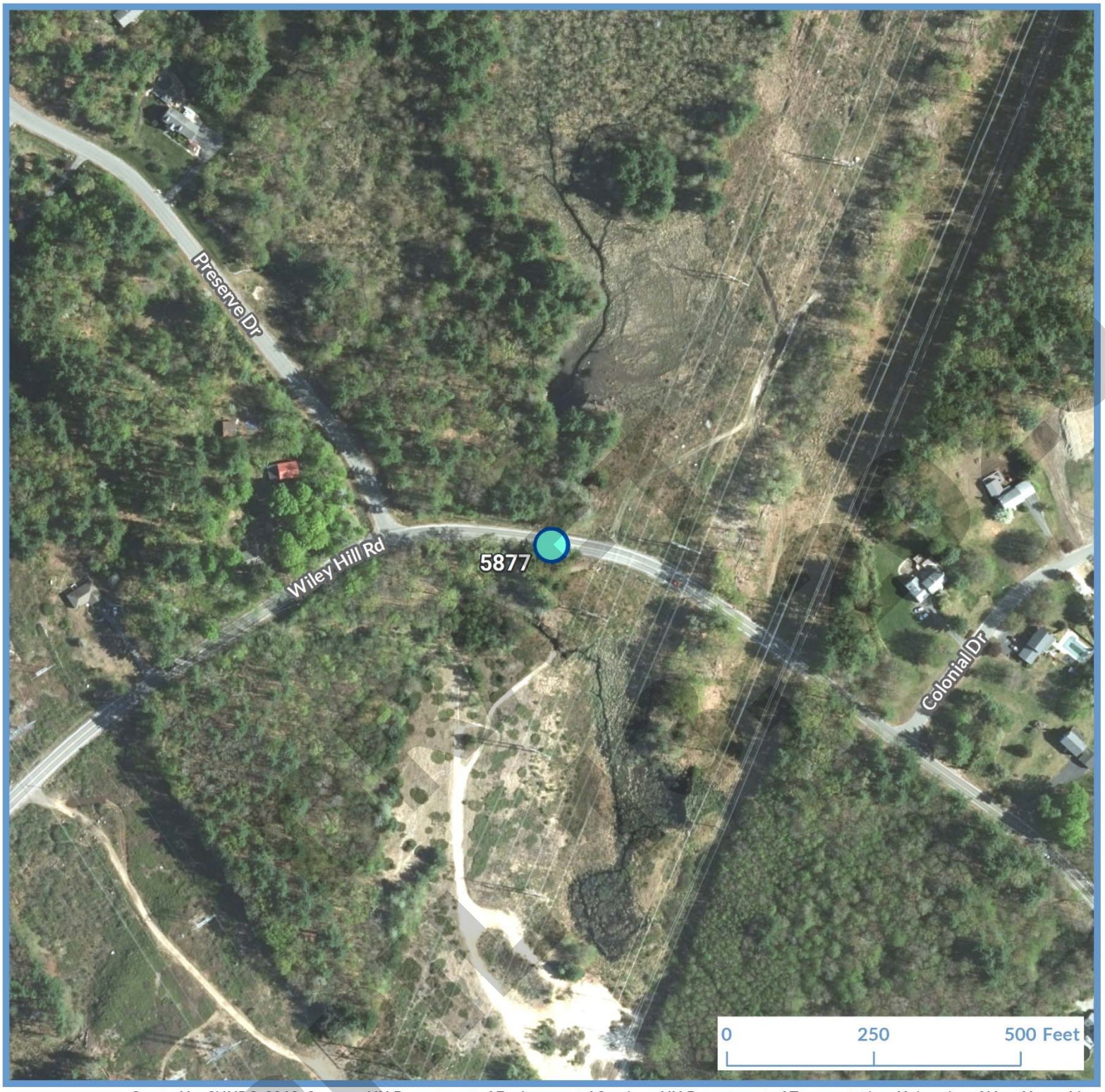
DRAFT
APRIL 13, 2020



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Londonderry, NH		Stream Crossing Detail Sheet			SADES ID 5927
Prioritization Score	**33**	**Traffic Volume**	**<20,000**	**Crossing Type**	**Stream**
SNHPC		**Asset Manager ID'd**	**No**	**Road Name**	**Route 102 (Nashua Road)**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Nesenkeag Brook**
		Flood Zone Category	**Floodway**	**Structure Type**	**Steel Corrugated Round Culvert**
		Culvert Condition	**Poor**	**Crossing Width**	**3.00'**
		10-Yr Hydraulic Vuln.	**Overtop**	**Open Height**	**3.00'**
		Crossing Material	**Metal**	**Obstruction**	**None**
Detail Sheet Created: January 17, 2020		**Beaver Activity**	**No**	**Assessment Date**	**06/29/2016**

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Created by SNHPC, 2019. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Londonderry, NH		Stream Crossing Detail Sheet			SADES ID 5877
Prioritization Score	**29**	**Traffic Volume**	**<5,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**Wiley Hill Road**
		Flood Hazard ID'd	**No**	**Stream Name**	**No Name**
		Flood Zone Category	**Minimal Hazard**	**Structure Type**	**Steel Corrugated Round Culvert**
		Culvert Condition	**Poor**	**Crossing Width**	**2.00'**
		10-Yr Hydraulic Vuln.	**Overtop**	**Open Height**	**2.00'**
		Crossing Material	**Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**06/27/2016**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020

APPROVED



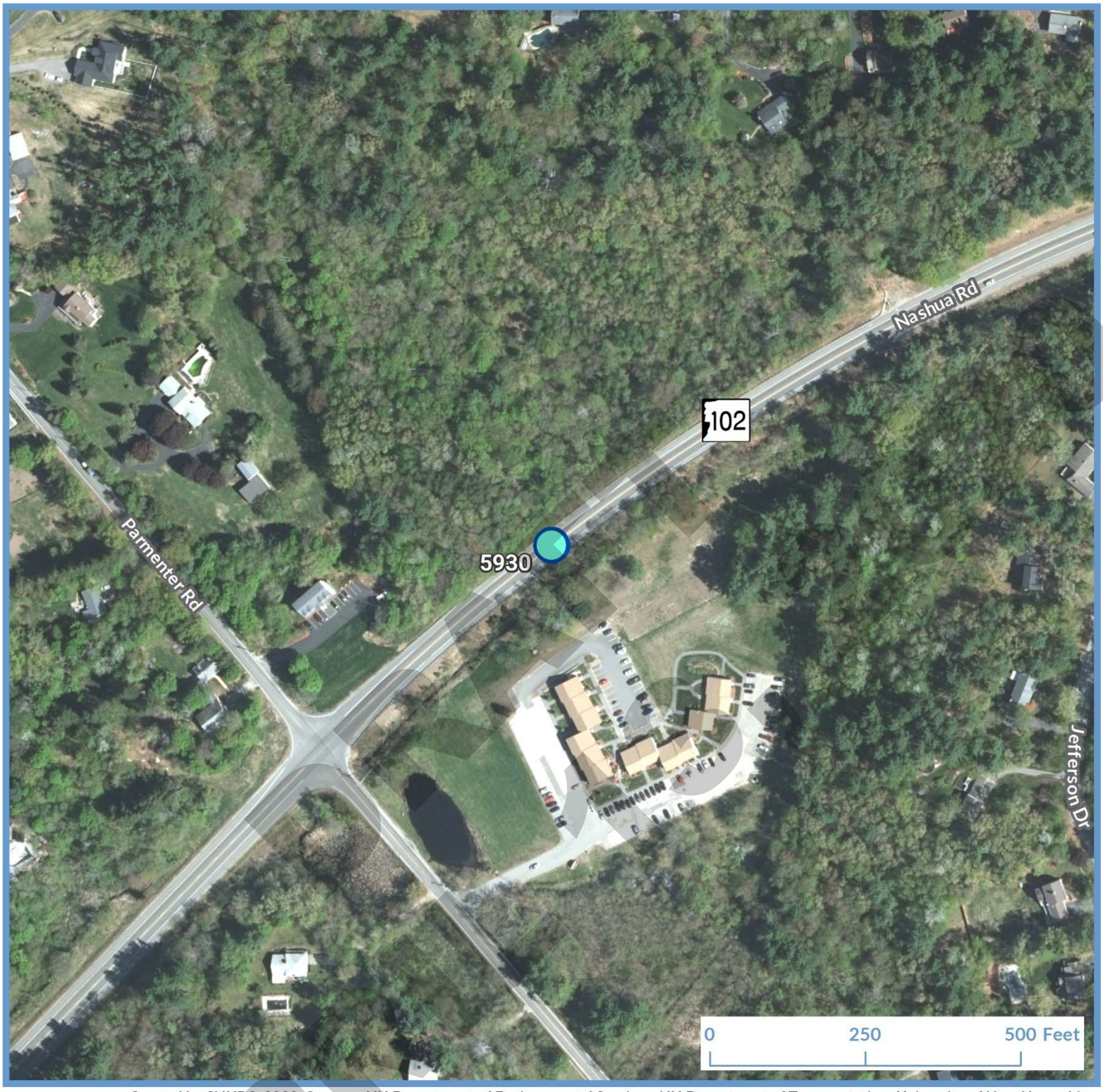
Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Londonderry, NH		Stream Crossing Detail Sheet			SADES ID 5926
Prioritization Score	**28**	**Traffic Volume**	**<20,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**No**	**Road Name**	**Parmenter Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Nesenkeag Brook**
		Flood Zone Category	**Floodway**	**Structure Type**	**Steel Corrugated Round Culvert**
		Culvert Condition	**Fair**	**Crossing Width**	**2.50'**
		10-Yr Hydraulic Vuln.	**Overtop**	**Open Height**	**2.50'**
		Crossing Material	**Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**06/29/2016**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020

APPROVED



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Londonderry, NH		Stream Crossing Detail Sheet			SADES ID 5930
Prioritization Score	**27**	**Traffic Volume**	**<20,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**No**	**Road Name**	**Route 102 (Nashua Road)**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Nesenkeag Brook**
		Flood Zone Category	**Floodway**	**Structure Type**	**Steel Corrugated Round Culvert**
		Culvert Condition	**Fair**	**Crossing Width**	**2.50'**
		10-Yr Hydraulic Vuln.	**Vulnerable**	**Open Height**	**2.50'**
		Crossing Material	**Metal**	**Obstruction**	**Wood**
		Beaver Activity	**No**	**Assessment Date**	**06/29/2016**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 24, 2020

APPROVED



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Londonderry, NH		Stream Crossing Detail Sheet			SADES ID 6770
Prioritization Score	**26**	**Traffic Volume**	**<10,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**Harvey Road**
		Flood Hazard ID'd	**No**	**Stream Name**	**Little Cohas Brook**
		Flood Zone Category	**Floodway**	**Structure Type**	**Steel Corrugated Round Culvert**
		Culvert Condition	**Fair**	**Crossing Width**	**8.00'**
		10-Yr Hydraulic Vuln.	**Pass**	**Open Height**	**8.00'**
		Crossing Material	**Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**07/28/2016**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 17, 2020

DRAFT APRIL

Prioritization Score Statistical Summary: Town of Londonderry

Traffic Volumes

Count	Totals
AADT>=30,000	4
AADT<30,000	2
AADT<20,000	23
AADT<10,000	22
AADT<5,000	15
AADT<1,000	84
TOTAL:	150

10-Yr Vulnerability

Category	Count
Overtop	4
Vulnerable	8
Unknown	88
Pass	14
Not Applicable	36
TOTAL:	150

Beaver Activity

Yes	11
No	139
TOTAL:	150

Total Crossings

Region	1438
Town	150

Flood Zone

Count	Totals
Floodway	59
100-Year Flood Zone	14
500-Year Flood Zone	10
Minimal Hazard	67
TOTAL:	150

Structure Material

Metal	30
Not Metal	120
TOTAL:	150

Flood Hazard

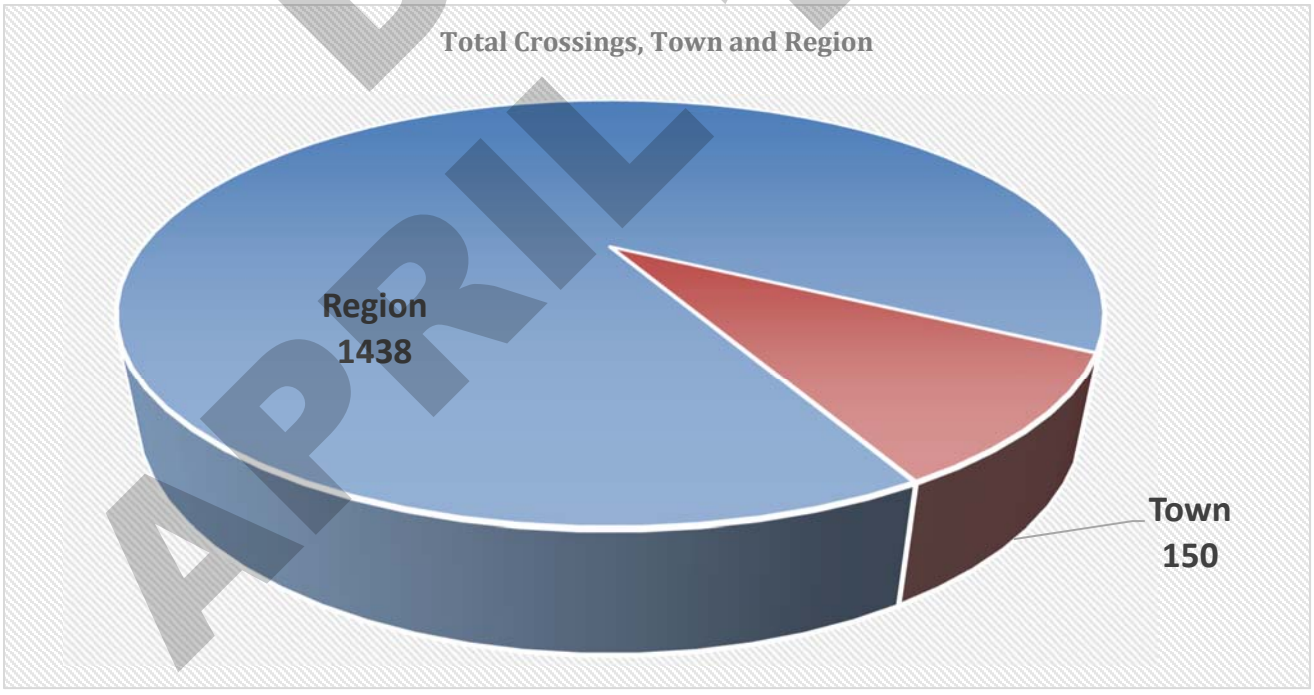
ID'd	14
Not ID'd	136
TOTAL:	150

Culvert Condition

Poor	16
Fair	24
Good	84
Unknown	26
TOTAL:	150

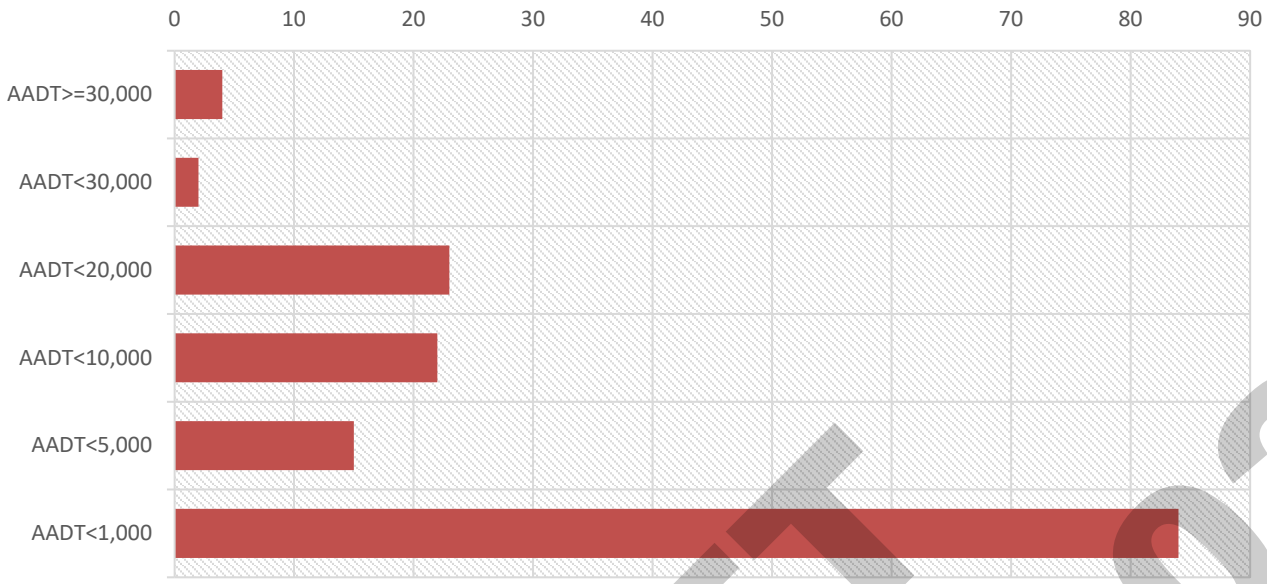
Asset Manager

ID'd	8
Not ID'd	142
TOTAL:	150



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APRIL 15, 2020

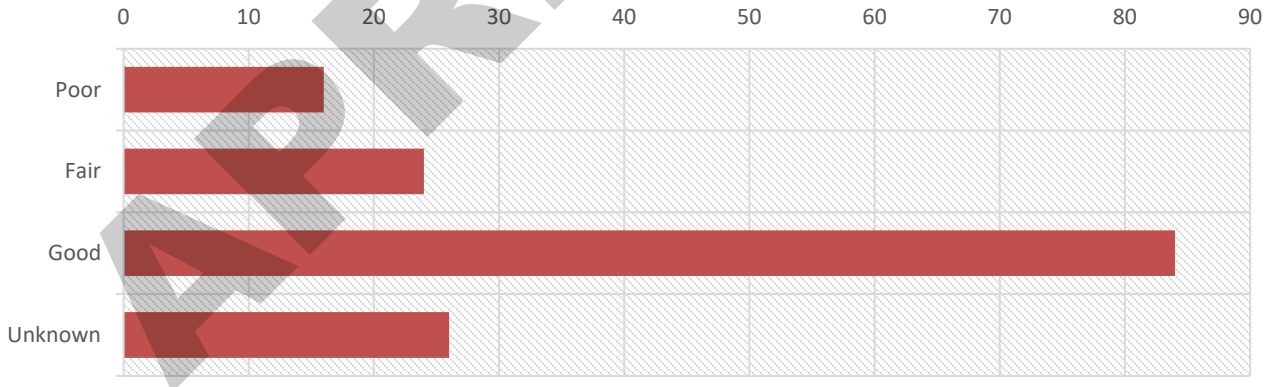
Muni. Count by Traffic Volume Category



Muni. Count by FEMA Flood Zone Categorey

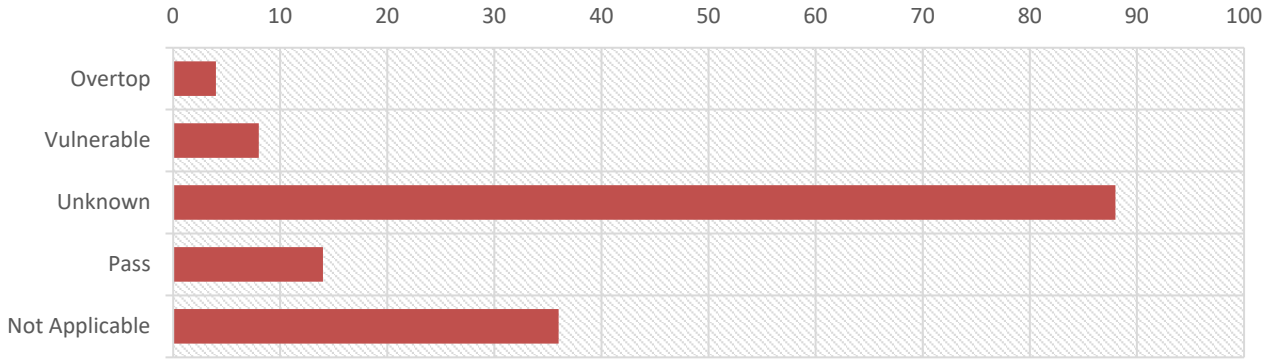


Muni. Count by Stream Crossing Condition

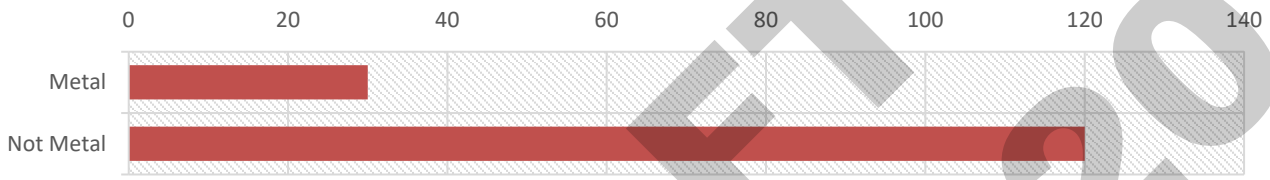


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APRIL 13, 2020

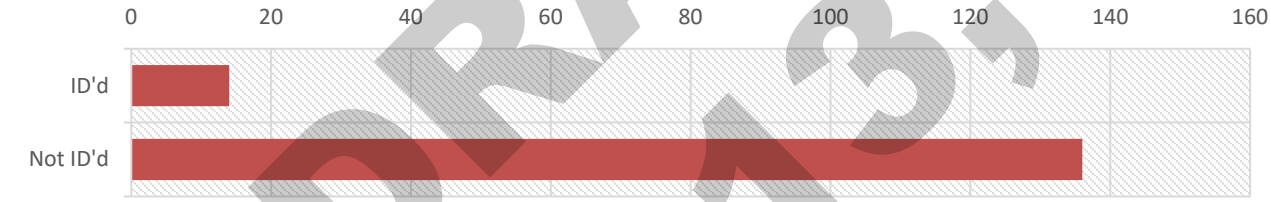
Muni. Count by 10-Yr Vulnerability



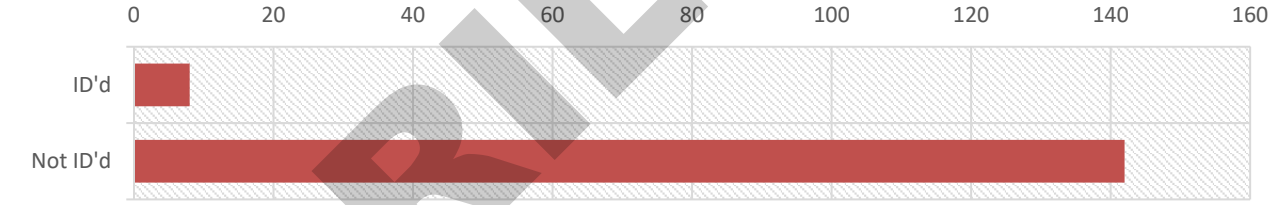
Muni. Count By Structure Material



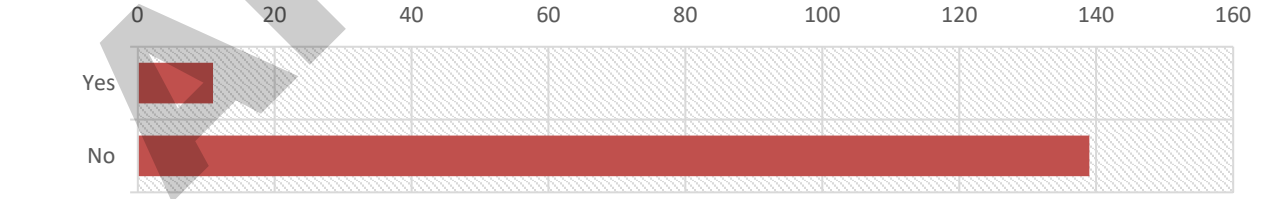
Muni. Count by Identified Flood Hazard History



Muni. Count by Asset Manager Identification



Total Region Count by Beaver Activity



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APRIL

Prioritization Results: City of Manchester

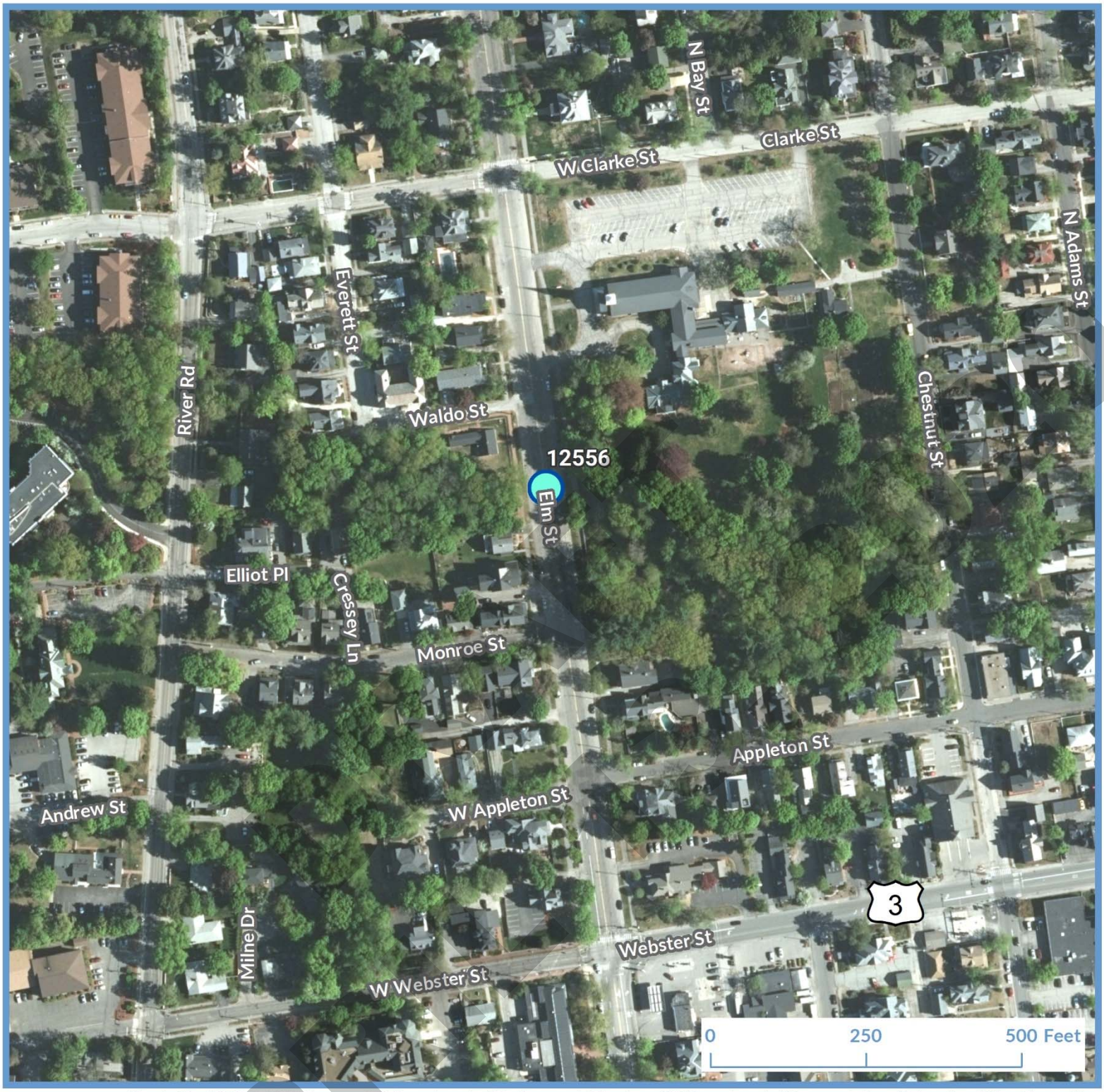
SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
12607	AADT<10,000	4	Yes	10	No	0	100-Year Flood Zone	4	Fair	5	Vulnerable	4	Not Metal	0	No	0	27
12556	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	27
999977	AADT<30,000	8	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	25
999945	AADT<20,000	6	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	24
999942	AADT<20,000	6	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	24
999873	AADT>=30,000	10	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	23
12603	AADT<20,000	6	No	0	No	0	500-Year Flood Zone	3	Poor	10	Vulnerable	4	Not Metal	0	No	0	23
10424	AADT<20,000	6	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	23
999972	AADT>=30,000	10	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	22
11100	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Unknown	3	Not Metal	0	No	0	22
10407	AADT<30,000	8	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	21
10406	AADT<30,000	8	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	21
10403	AADT<30,000	8	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	21
10402	AADT<30,000	8	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	21
10258	AADT<20,000	6	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	20
999947	AADT<5,000	2	Yes	10	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	20
10409	AADT<20,000	6	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	19
10405	AADT<20,000	6	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	19
10404	AADT<20,000	6	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	19
10385	AADT<20,000	6	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	19
999944	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	18
12526	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	18
2780	AADT>=30,000	10	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	17
12599	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Fair	5	Vulnerable	4	Not Metal	0	No	0	17
12550	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	17
999886	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	17
12555	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	17
999940	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
10410	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
12703	AADT<20,000	6	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	16
999941	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	16
10212	AADT<10,000	4	No	0	Yes	5	Minimal Hazard	0	Fair	5	Pass	0	Metal	2	No	0	16
12604	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	15
12525	AADT<20,000	6	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	15
11102	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Fair	5	Pass	0	Not Metal	0	No	0	15
10257	AADT<20,000	6	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	15
999900	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	15
12602	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Fair	5	Unknown	3	Not Metal	0	No	0	15
8367	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	15
1058	AADT<5,000	2	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	15
999997	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	14
12700	AADT<10,000	4	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	14
12601	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Unknown	3	Metal	2	No	0	14
12554	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14

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Prioritization Results: City of Manchester

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
12524	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	14
2779	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	13
14942	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	13
10255	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Fair	5	Unknown	3	Not Metal	0	No	0	13
5202	AADT<20,000	6	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Not Metal	0	No	0	12
12701	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Fair	5	Not Applicable	0	Not Metal	0	No	0	12
999982	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999980	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999898	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999897	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999887	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999861	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
12553	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	12
11101	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Not Applicable	0	Metal	2	No	0	12
12702	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Metal	2	No	0	11
7245	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Fair	5	Not Applicable	0	Not Metal	0	No	0	11
10256	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Fair	5	Unknown	3	Not Metal	0	No	0	11
999987	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
10411	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
6726	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	9
6725	AADT<20,000	6	No	0	No	0	500-Year Flood Zone	3	Good	0	Pass	0	Not Metal	0	No	0	9
6723	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	9
6852	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	8
999866	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999858	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
12605	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	No	0	7
6911	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
11103	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
7226	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Vulnerable	4	Not Metal	0	No	0	6
7225	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	6
229	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	Yes	2	6
2817	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
6724	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0

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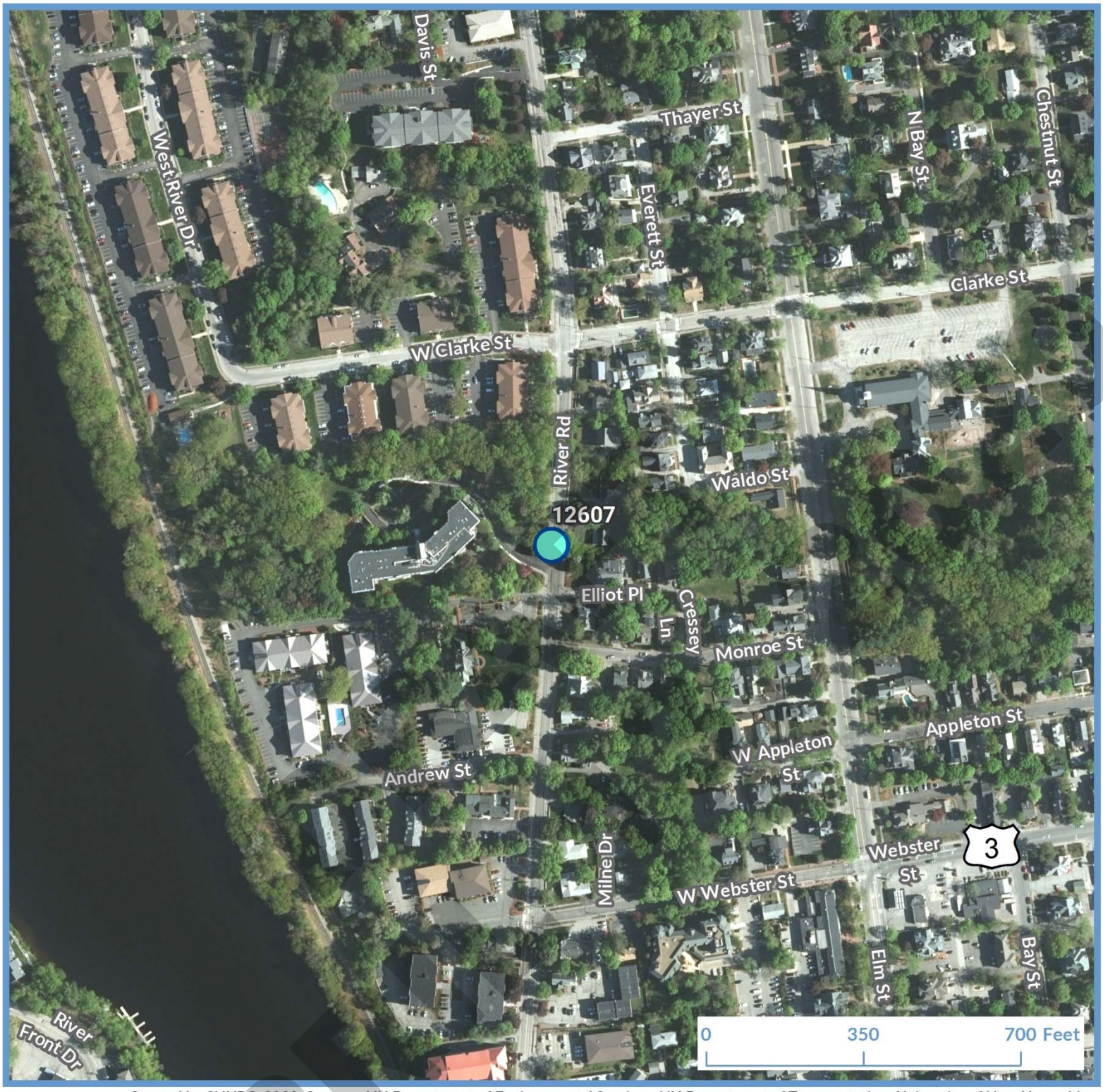
Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Manchester, NH		Stream Crossing Detail Sheet			SADES ID 12556
Prioritization Score	**27**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**Elm Street**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Data**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Stone Box Culvert**
		Culvert Condition	**Fair**	**Crossing Width**	**5.70'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**08/21/2018**

SNHPC

Detail Sheet Created: January 24, 2020

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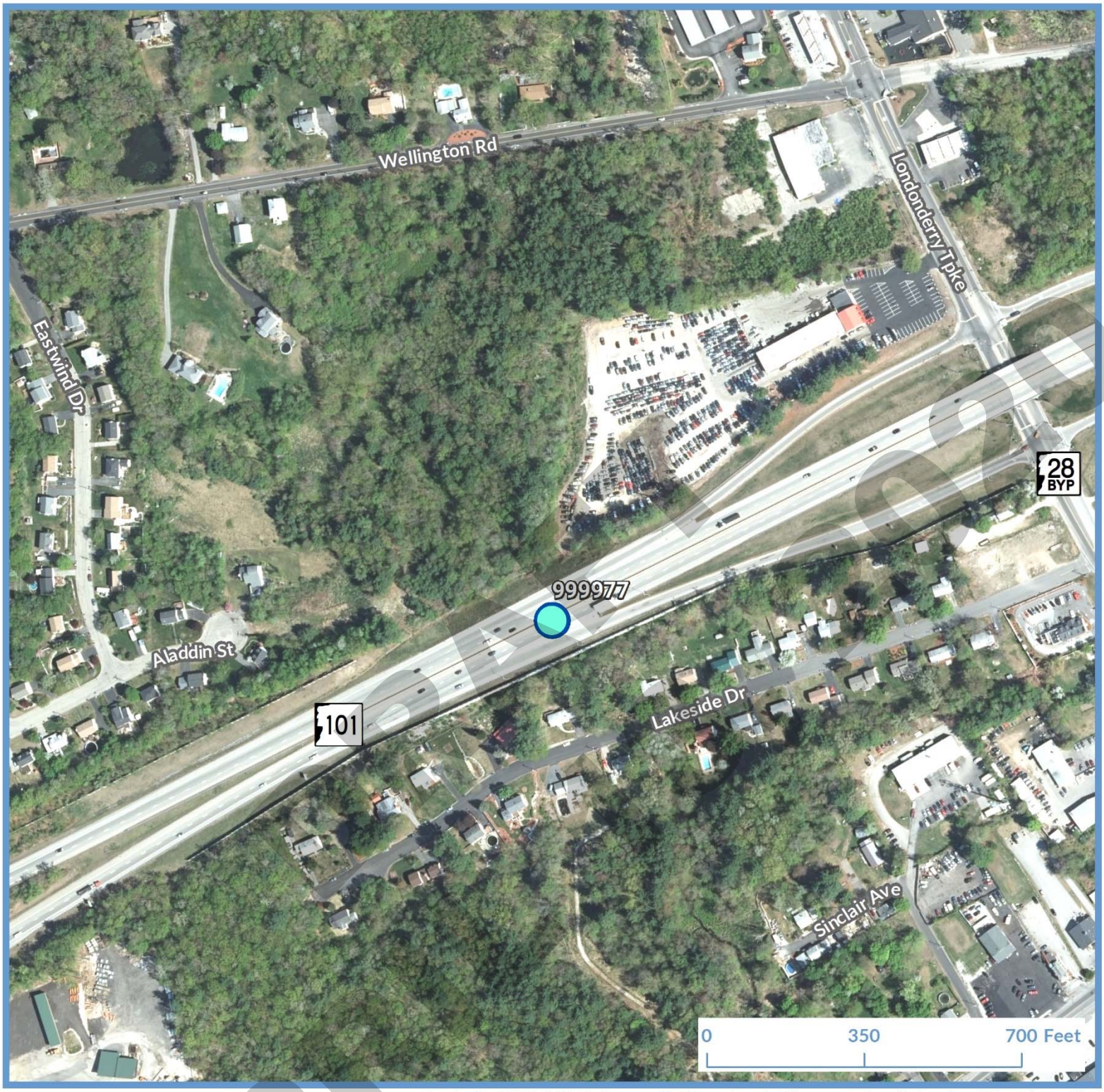
Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Manchester, NH		Stream Crossing Detail Sheet			SADES ID 12607
Prioritization Score	**27**	**Traffic Volume**	**<10,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**River Road**
		Flood Hazard ID'd	**No**	**Stream Name**	**No Data**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Stone Box Culvert**
		Culvert Condition	**Fair**	**Crossing Width**	**6.00'**
		10-Yr Hydraulic Vuln.	**Vulnerable**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**08/23/2018**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
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Detail Sheet Created: January 24, 2020

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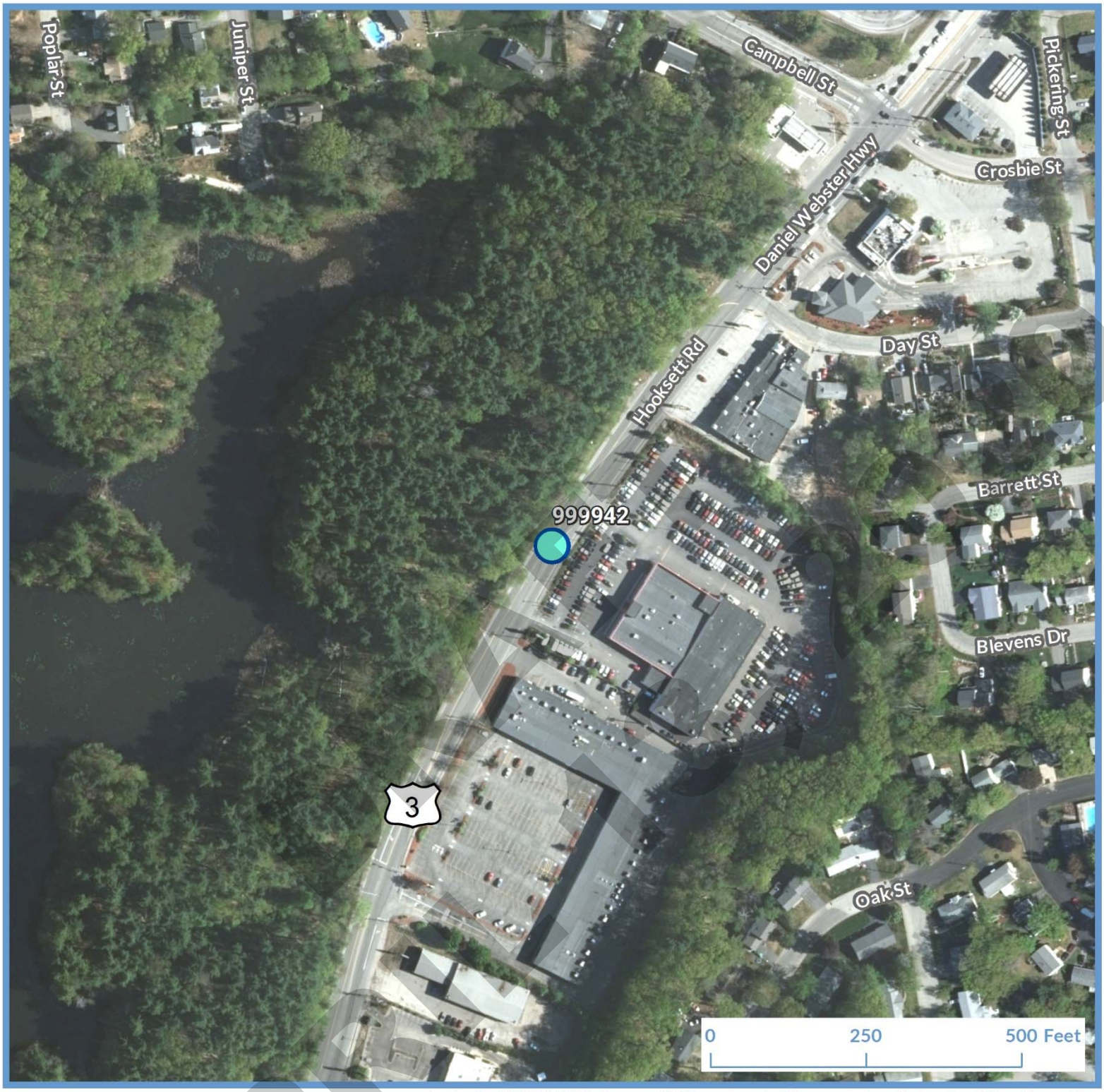
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Manchester, NH		Stream Crossing Detail Sheet			SADES ID 999977
Prioritization Score	**25**	**Traffic Volume**	**<30,000**	**Crossing Type**	**No Data**
		Asset Manager ID'd	**No**	**Road Name**	**Route 101**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Data**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**No Data**
		Culvert Condition	**Unknown**	**Crossing Width**	**No Data**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**No Data**
		Beaver Activity	**No**	**Assessment Date**	**Not Yet Surveyed**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION

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Detail Sheet Created: January 24, 2020



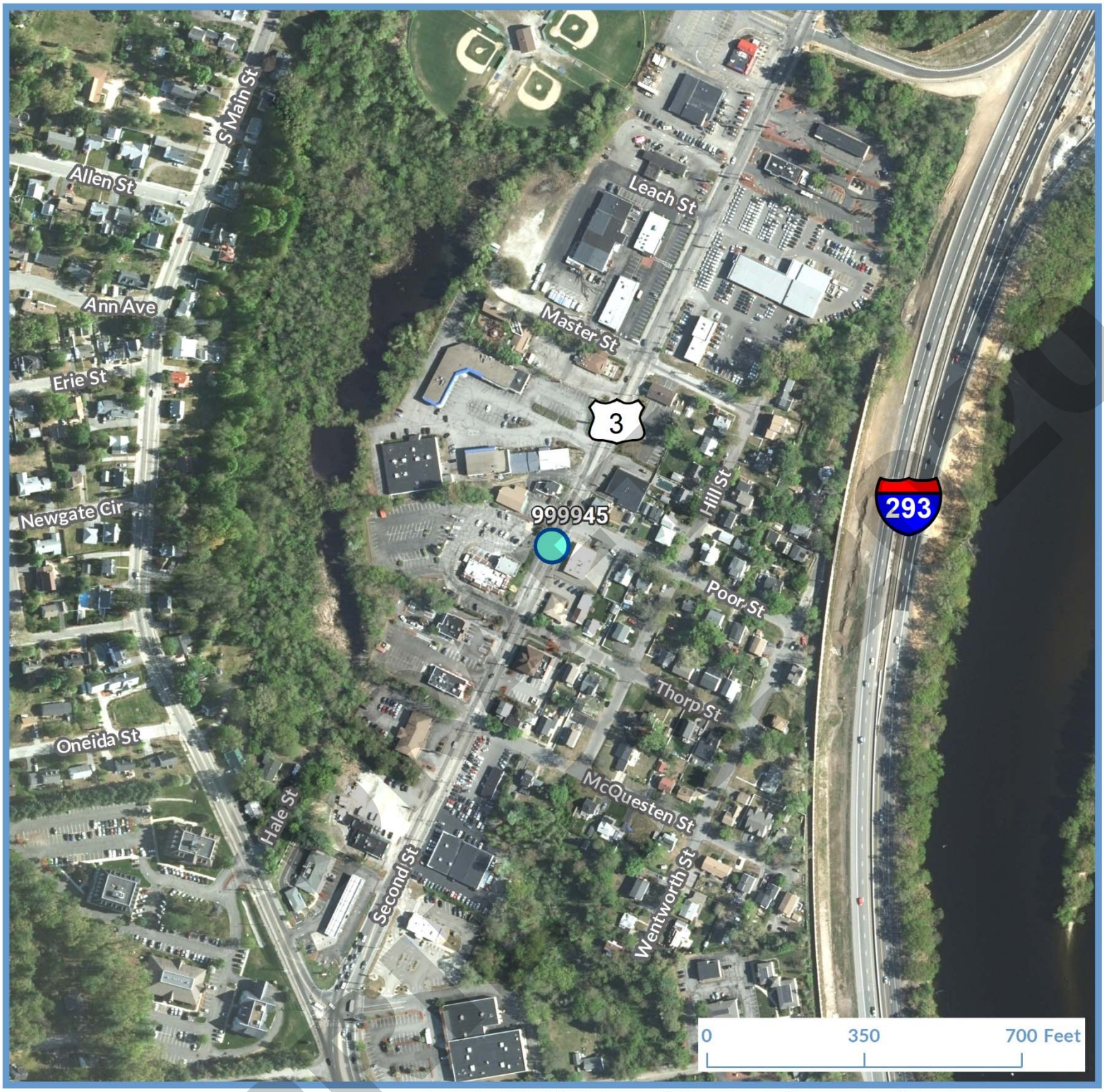
Created by SNHPC, 2020. Sources: NH Department of Transportation; University of New Hampshire.

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Manchester, NH		Stream Crossing Detail Sheet			SADES ID 999942
Prioritization Score	**24**	**Traffic Volume**	**<20,000**	**Crossing Type**	**No Data**
		Asset Manager ID'd	**Yes**	**Road Name**	**Route 3 (Hooksett Road)**
		Flood Hazard ID'd	**No**	**Stream Name**	**No Data**
		Flood Zone Category	**Minimal Hazard**	**Structure Type**	**No Data**
		Culvert Condition	**Unknown**	**Crossing Width**	**No Data**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**No Data**
		Beaver Activity	**No**	**Assessment Date**	**Not Yet Surveyed**

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Detail Sheet Created: January 24, 2020



Created by SNHPC, 2020. Sources: NH Department of Transportation; University of New Hampshire.

Manchester, NH		Stream Crossing Detail Sheet			SADES ID 999945
Prioritization Score	**24**	**Traffic Volume**	**<20,000**	**Crossing Type**	**No Data**
		Asset Manager ID'd	**Yes**	**Road Name**	**Route 3 (Second Street)**
		Flood Hazard ID'd	**No**	**Stream Name**	**No Data**
		Flood Zone Category	**Minimal Hazard**	**Structure Type**	**No Data**
		Culvert Condition	**Unknown**	**Crossing Width**	**No Data**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**No Data**
		Beaver Activity	**No**	**Assessment Date**	**Not Yet Surveyed**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
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Detail Sheet Created: January 24, 2020

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Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Manchester, NH		Stream Crossing Detail Sheet			SADES ID 12603
Prioritization Score	**23**	**Traffic Volume**	**<20,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**No**	**Road Name**	**Candia Road**
		Flood Hazard ID'd	**No**	**Stream Name**	**No Data**
		Flood Zone Category	**500-Yr Flood Zone**	**Structure Type**	**Concrete Round Culvert**
		Culvert Condition	**Poor**	**Crossing Width**	**2.50'**
		10-Yr Hydraulic Vuln.	**Vulnerable**	**Open Height**	**2.50'**
		Crossing Material	**Not Metal**	**Obstruction**	**Wood and Sediment**
		Beaver Activity	**No**	**Assessment Date**	**08/23/2018**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
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Detail Sheet Created: January 24, 2020

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Prioritization Score Statistical Summary: City of Manchester

Traffic Volumes

Count	Totals
AADT>=30,000	4
AADT<30,000	7
AADT<20,000	20
AADT<10,000	12
AADT<5,000	14
AADT<1,000	20
TOTAL:	77

10-Yr Vulnerability

Category	Count
Overtop	0
Vulnerable	4
Unknown	53
Pass	5
Not Applicable	15
TOTAL:	77

Beaver Activity

Yes	2
No	75
TOTAL:	77

Total Crossings

Region	1511
Town	77

Flood Zone

Count	Totals
Floodway	9
100-Year Flood Zone	33
500-Year Flood Zone	7
Minimal Hazard	28
TOTAL:	77

Structure Material

Metal	5
Not Metal	72
TOTAL:	77

Flood Hazard

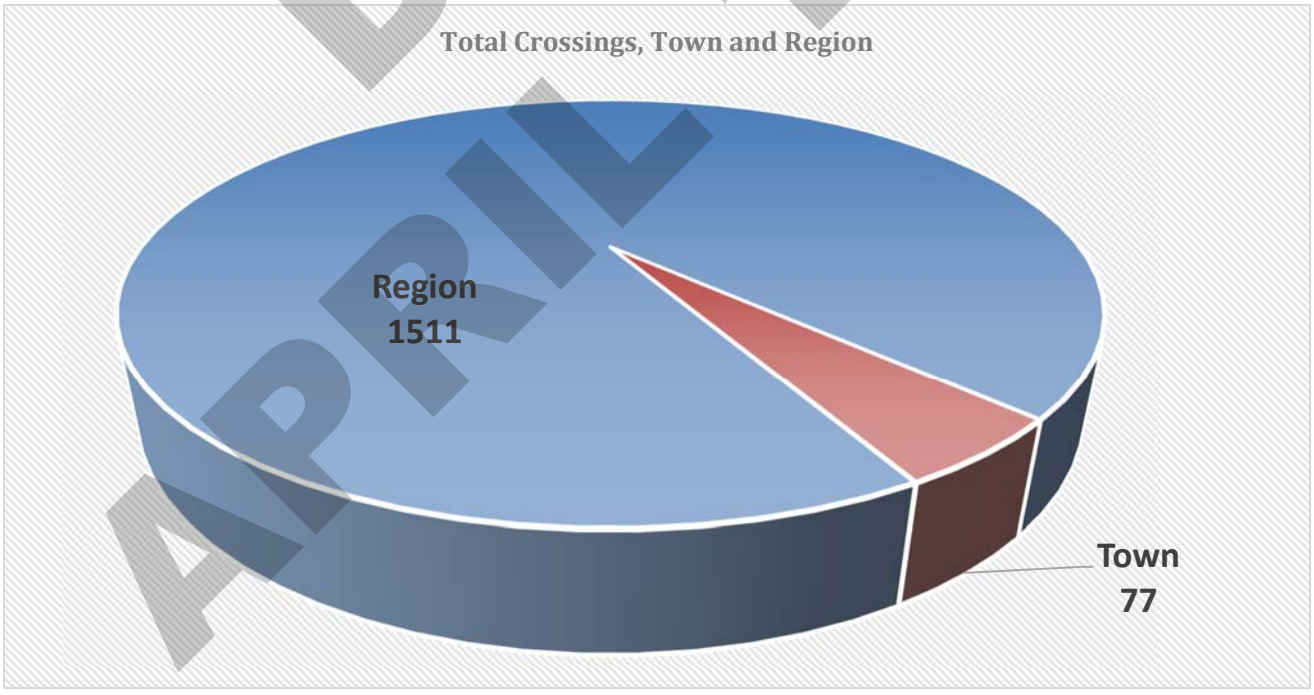
ID'd	17
Not ID'd	60
TOTAL:	77

Culvert Condition

Poor	4
Fair	19
Good	21
Unknown	33
TOTAL:	77

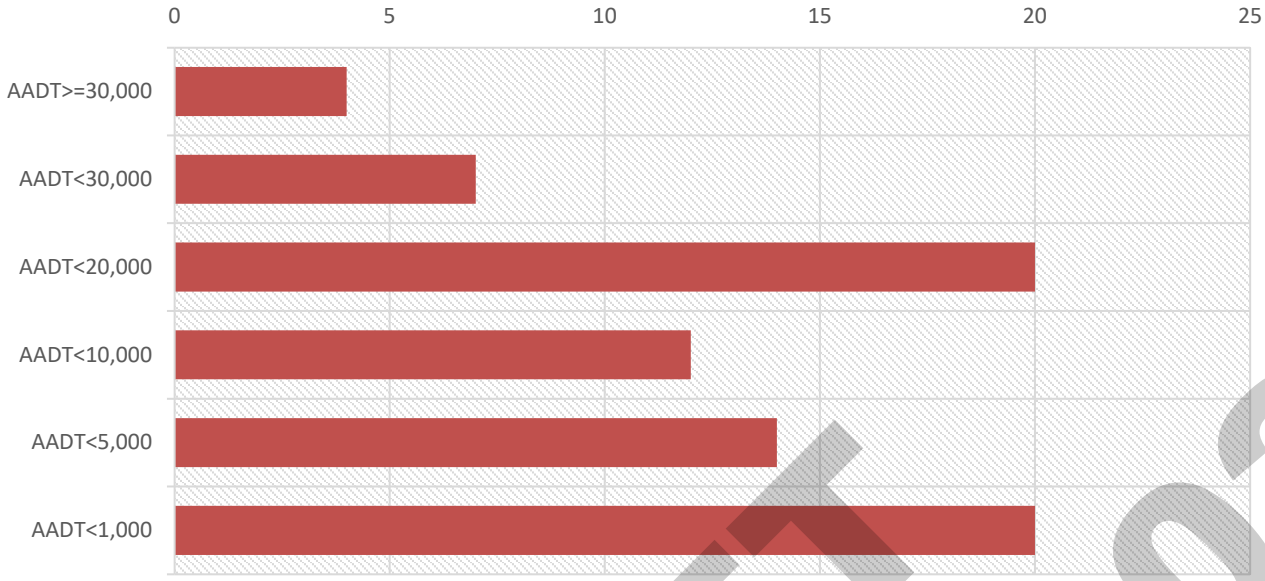
Asset Manager

ID'd	7
Not ID'd	70
TOTAL:	77

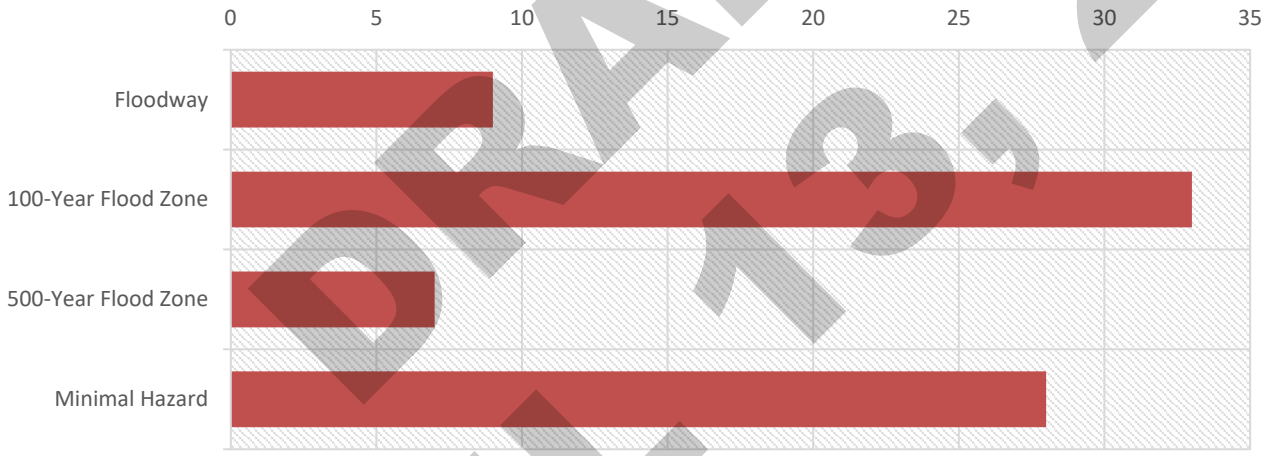


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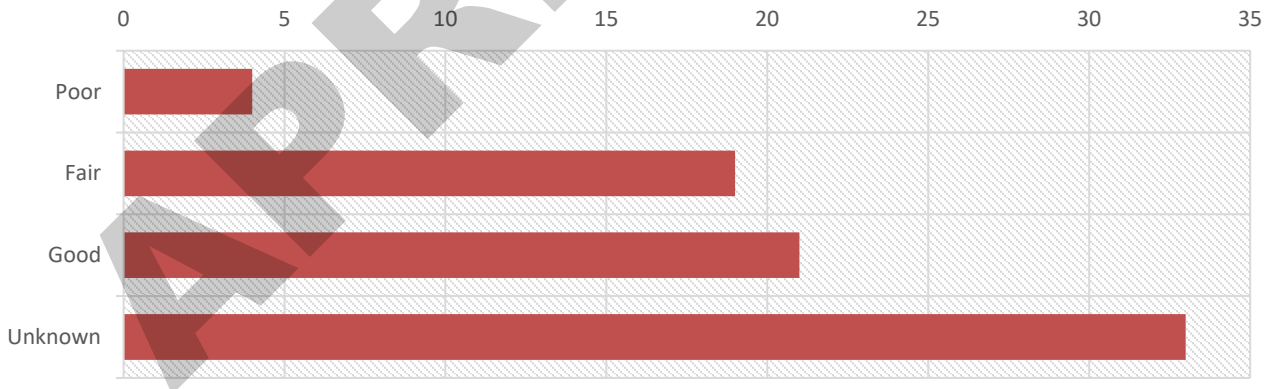
Muni. Count by Traffic Volume Category



Muni. Count by FEMA Flood Zone Categorey

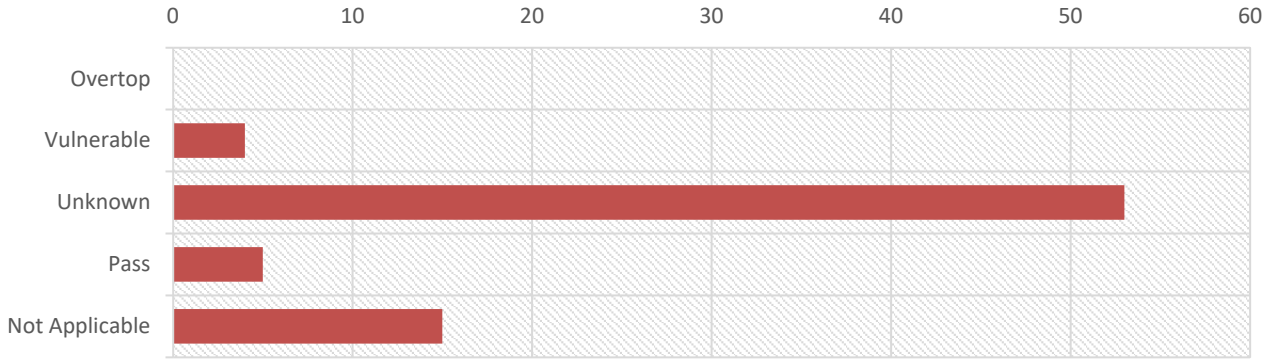


Muni. Count by Stream Crossing Condition

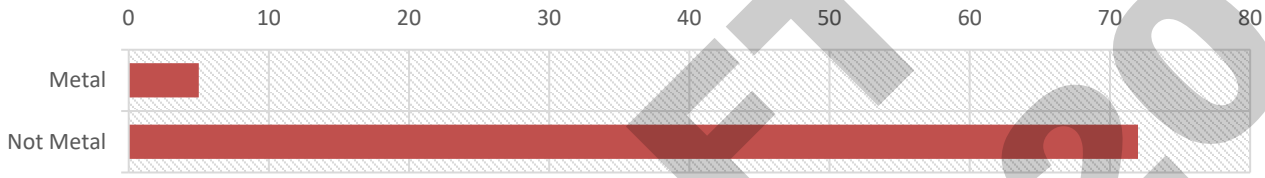


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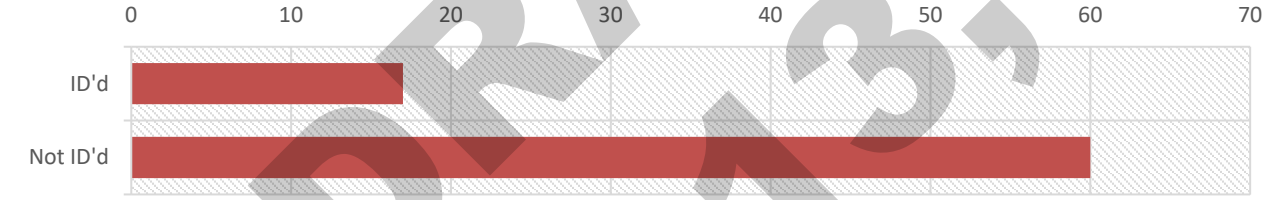
Muni. Count by 10-Yr Vulnerability



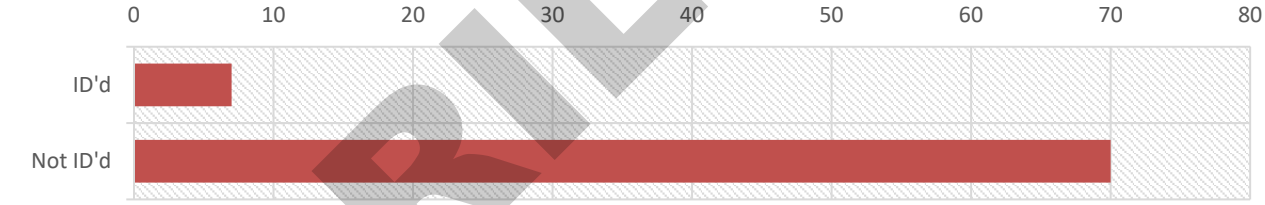
Muni. Count By Structure Material



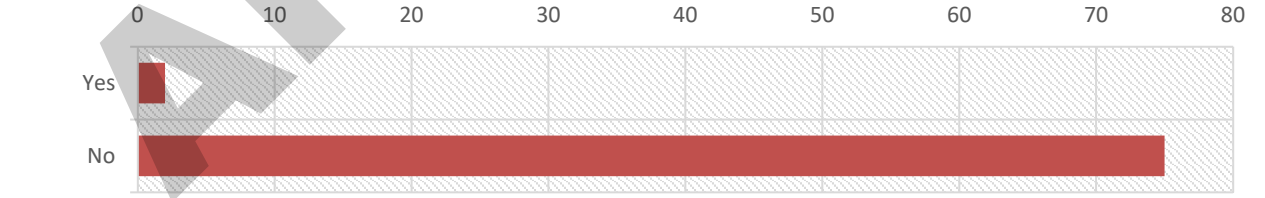
Muni. Count by Identified Flood Hazard History



Muni. Count by Asset Manager Identification



Total Region Count by Beaver Activity



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Prioritization Results: Town of New Boston

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
1075	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	21
999948	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	19
5189	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	Yes	2	18
1242	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Metal	2	No	0	17
1079	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	Yes	2	17
999968	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	17
5196	AADT<1,000	0	No	0	No	0	Floodway	5	Poor	10	Not Applicable	0	Metal	2	No	0	17
5275	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	15
1083	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	15
5236	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Metal	2	No	0	15
1198	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
777	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
5280	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14
807	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	14
5245	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	14
5258	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	12
5257	AADT<5,000	2	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	12
1236	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	12
800	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	12
12963	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	11
1200	AADT<5,000	2	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	11
798	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	11
5134	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	11
1233	AADT<5,000	2	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	10
1232	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	10
5263	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
5218	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
5195	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
14438	AADT<10,000	4	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	9
1085	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
990	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
987	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
797	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
12964	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
1212	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	9
1128	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
1087	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	9
1084	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	9
776	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
999891	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
5239	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	8
5237	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	8
1220	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Metal	2	No	0	8
1088	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Metal	2	No	0	8

DRAFT 1/8/20

Prioritization Results: Town of New Boston

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
1076	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
5262	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	7
5238	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	7
1238	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	7
1005	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	7
1004	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	7
9464	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
9463	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
9445	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
1192	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
1069	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
1003	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
778	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Not Applicable	0	Metal	2	Yes	2	7
1310	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
1077	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
995	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
1201	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	6
799	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	6
9466	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
5271	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1244	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1213	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1211	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1206	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1195	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1082	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1074	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
986	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
5264	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	5
5217	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	5
1228	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1226	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1225	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1224	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1219	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1210	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1196	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1001	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1002	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	4
9410	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	Yes	2	4
1127	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
805	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
9465	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9444	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3

DRAFT 3/18/2020

Prioritization Results: Town of New Boston

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
9443	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9426	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Not Applicable	0	Not Metal	0	No	0	3
9423	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5282	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5278	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5276	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1243	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1241	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1240	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1239	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1237	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1235	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1231	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1229	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1227	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1223	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1222	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1221	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1215	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1214	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1209	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1207	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1205	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1204	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1203	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1202	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1199	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1197	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1193	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1080	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1007	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1006	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
999	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
998	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
997	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
996	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
806	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1234	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
1230	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
1218	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
1086	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
1078	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
1000	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
5127	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0

DRAFT 1/8/2020

Prioritization Results: Town of New Boston

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
804	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0

DRAFT
APRIL 13, 2020



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; US Census Bureau; University of New Hampshire.

New Boston, NH		Stream Crossing Detail Sheet			SADES ID 1075
Prioritization Score	**21**	**Traffic Volume**	**<5,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**No**	**Road Name**	**Francestown Road**
		Flood Hazard ID'd	**No**	**Stream Name**	**No Name**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Steel Corrugated Round Culvert**
		Culvert Condition	**Poor**	**Crossing Width**	**2.00'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**2.00'**
		Crossing Material	**Metal**	**Obstruction**	**Sediment**
		Beaver Activity	**No**	**Assessment Date**	**5/02/2012**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION
SNHPC

Detail Sheet Created: January 24, 2020

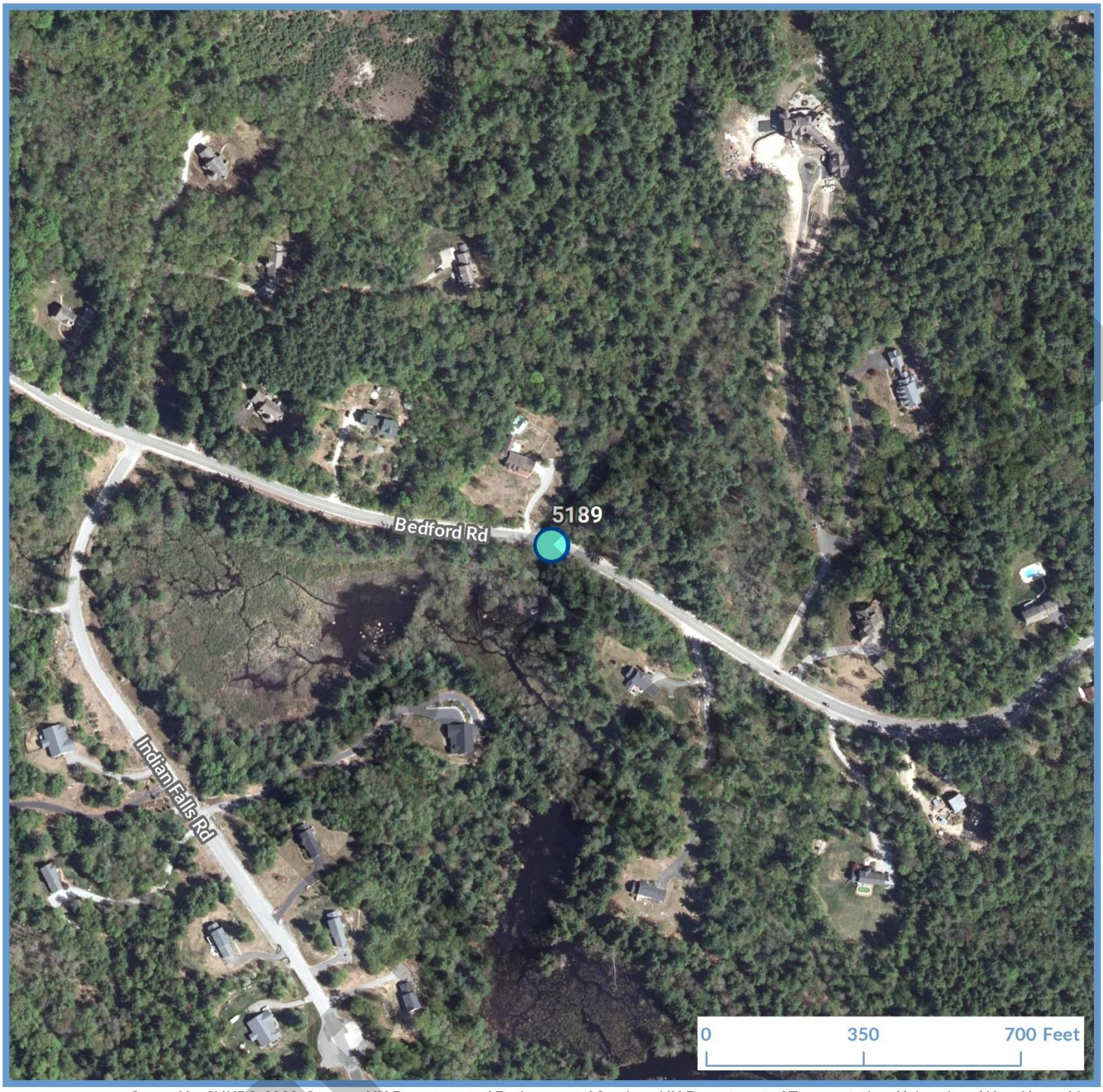
API



Created by SNHPC, 2020. Sources: NH Department of Transportation; University of New Hampshire.

New Boston, NH		Stream Crossing Detail Sheet			SADES ID 999948
Prioritization Score	**19**	**Traffic Volume**	**<5,000**	**Crossing Type**	**Stream**
SNHPC		**Asset Manager ID'd**	**No**	**Road Name**	**Route 13 (River Road)**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Data**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**No Data**
		Culvert Condition	**Unknown**	**Crossing Width**	**No Data**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**No Data**
Detail Sheet Created: January 24, 2020		**Beaver Activity**	**No**	**Assessment Date**	**Not Yet Surveyed**

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Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

New Boston, NH		Stream Crossing Detail Sheet			SADES ID 5189
Prioritization Score	**18**	**Traffic Volume**	**<5,000**	**Crossing Type**	**Stream**
SNHPC		**Asset Manager ID'd**	**No**	**Road Name**	**Bedford Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Bog Brook**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Aluminum Corr. Elliptical Culv.**
		Culvert Condition	**Good**	**Crossing Width**	**8.30'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Metal**	**Obstruction**	**None**
Detail Sheet Created: January 24, 2020		**Beaver Activity**	**Yes**	**Assessment Date**	**6/27/2013**

API

Prioritization Score Statistical Summary: Town of New Boston

Traffic Volumes

Count	Totals
AADT>=30,000	0
AADT<30,000	0
AADT<20,000	0
AADT<10,000	1
AADT<5,000	41
AADT<1,000	91
TOTAL:	133

10-Yr Vulnerability

Category	Count
Overtop	0
Vulnerable	0
Unknown	99
Pass	0
Not Applicable	34
TOTAL:	133

Beaver Activity

Yes	9
No	124
TOTAL:	133

Total Crossings

Region	1455
Town	133

Flood Zone

Count	Totals
Floodway	17
100-Year Flood Zone	35
500-Year Flood Zone	4
Minimal Hazard	77
TOTAL:	133

Structure Material

Metal	34
Not Metal	99
TOTAL:	133

Flood Hazard

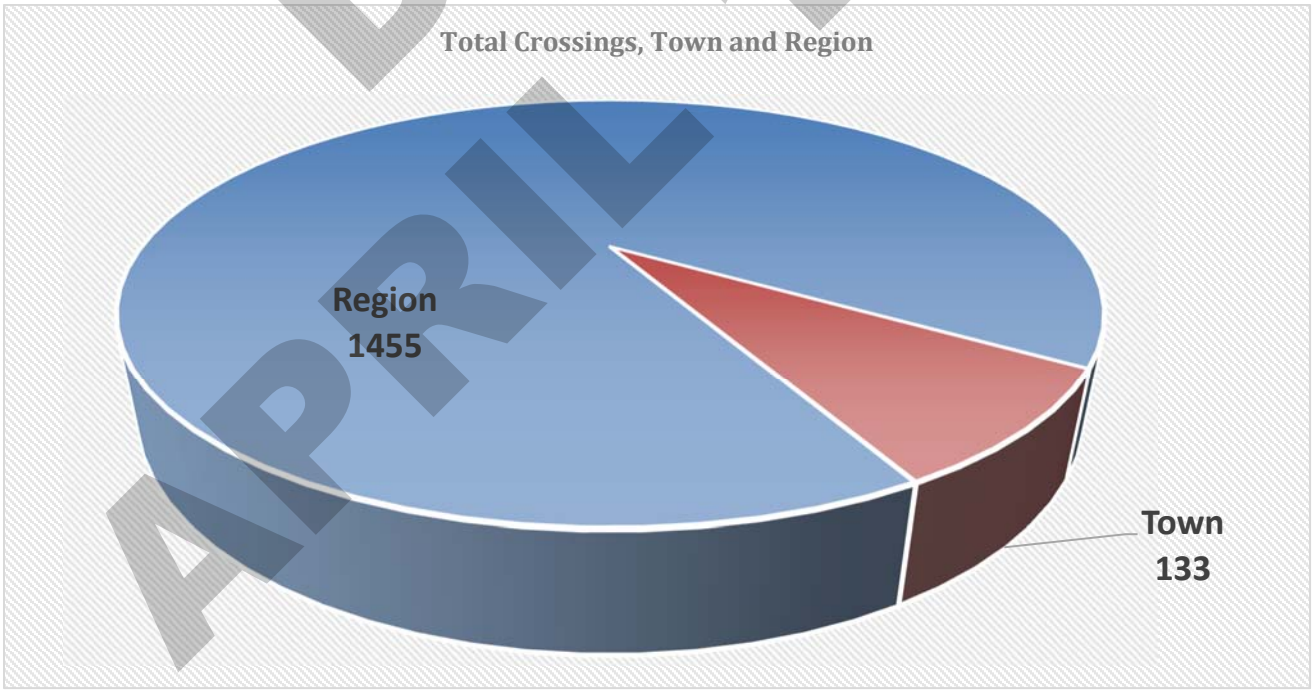
ID'd	22
Not ID'd	111
TOTAL:	133

Culvert Condition

Poor	6
Fair	0
Good	124
Unknown	3
TOTAL:	133

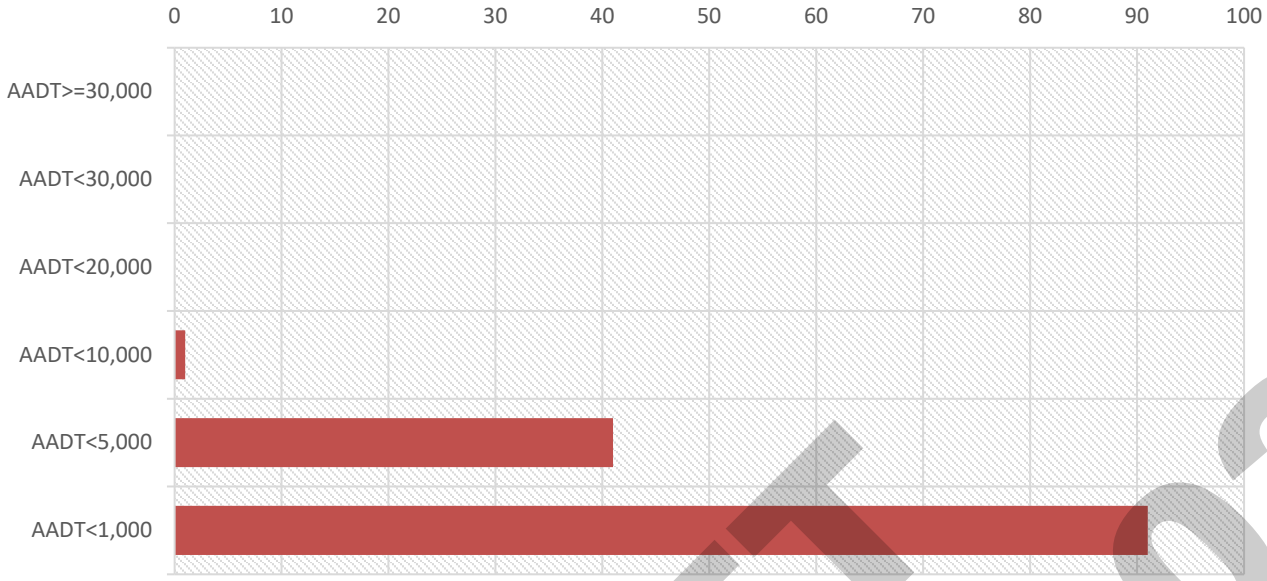
Asset Manager

ID'd	0
Not ID'd	133
TOTAL:	133



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APRIL 15, 2020

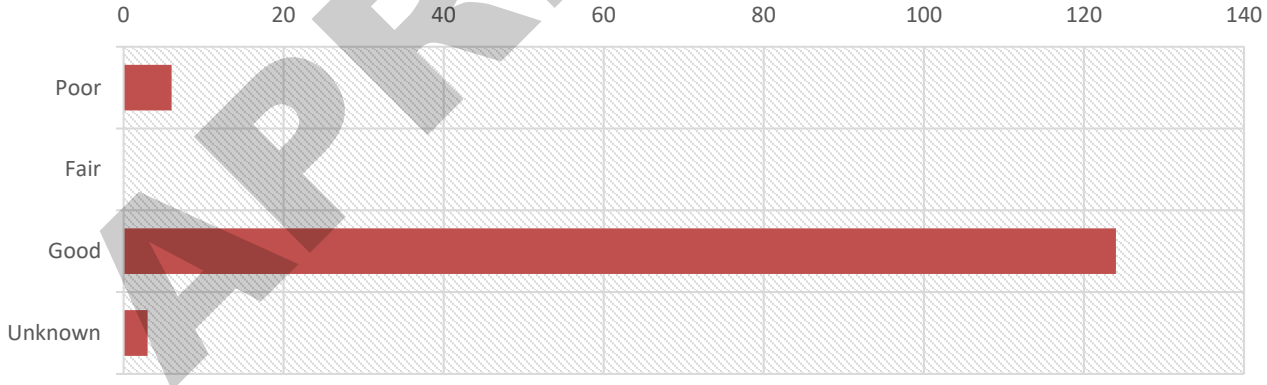
Muni. Count by Traffic Volume Category



Muni. Count by FEMA Flood Zone Categorey

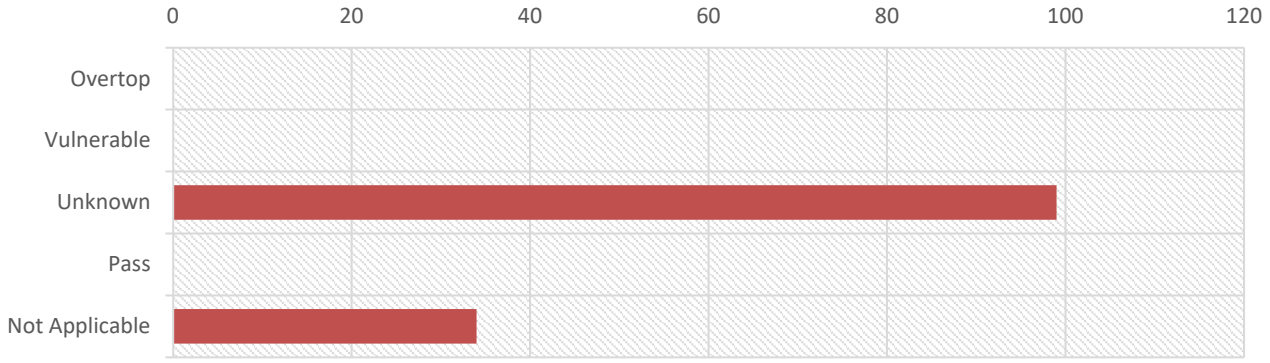


Muni. Count by Stream Crossing Condition

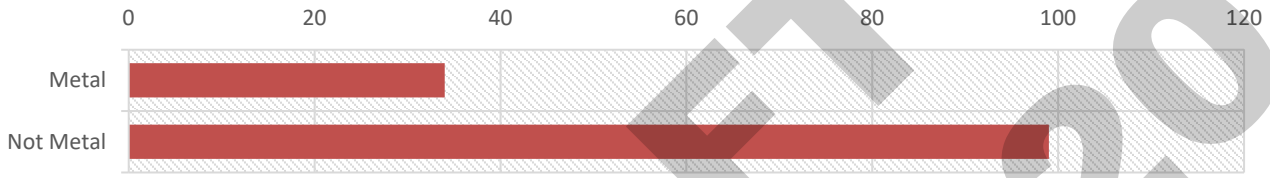


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APRIL 13, 2020

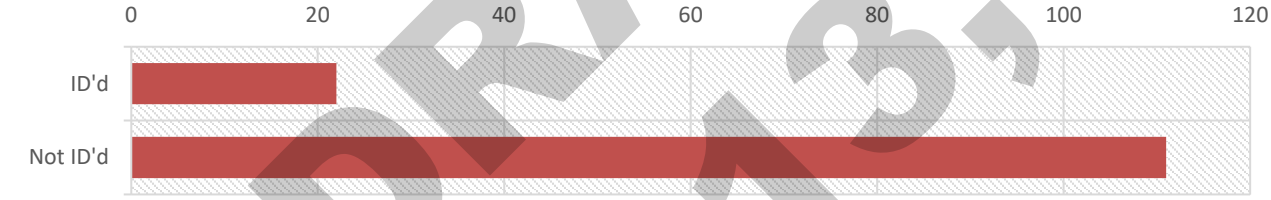
Muni. Count by 10-Yr Vulnerability



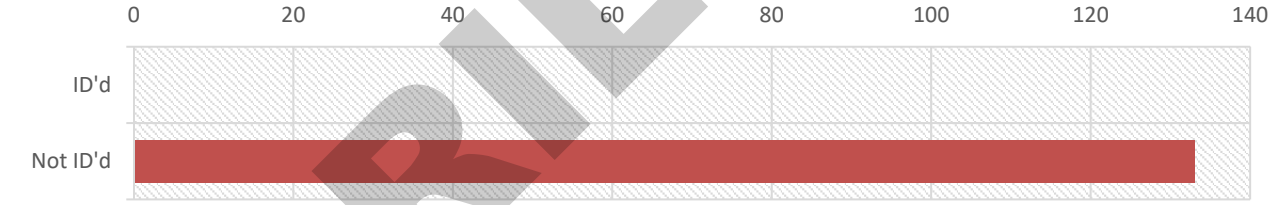
Muni. Count By Structure Material



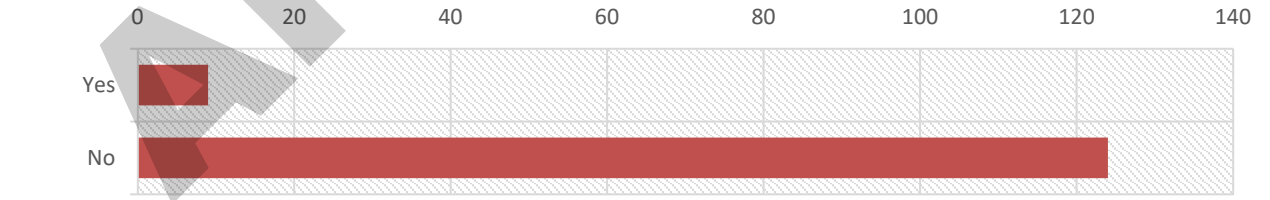
Muni. Count by Identified Flood Hazard History



Muni. Count by Asset Manager Identification



Total Region Count by Beaver Activity



DRAFT
APRIL 13, 2020

Prioritization Results: Town of Weare

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
901	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	28
900	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Poor	10	Unknown	3	Metal	2	No	0	28
999955	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	27
5247	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	24
5214	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	24
5213	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	24
999957	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	23
999956	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	22
14141	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Fair	5	Not Applicable	0	Not Metal	0	Yes	2	22
1073	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	22
907	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	22
15246	AADT<5,000	2	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	21
1253	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	21
905	AADT<10,000	4	Yes	10	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	20
5186	AADT<5,000	2	Yes	10	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	19
5253	AADT<1,000	0	Yes	10	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	19
919	AADT<1,000	0	Yes	10	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	17
926	AADT<10,000	4	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	16
1256	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Metal	2	No	0	15
1107	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	15
1106	AADT<1,000	0	Yes	10	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	15
999950	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	14
5187	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	14
1103	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	14
1072	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	14
934	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	No	0	14
1101	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	13
9412	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
1071	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Unknown	3	Not Metal	0	No	0	13
906	AADT<1,000	0	Yes	10	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	13
999874	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999954	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999949	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999896	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
1065	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	Yes	2	12
922	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	11
5223	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	11
5188	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	11
1104	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	11
1068	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	Yes	2	11
999998	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
999879	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	10
1110	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	10
908	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	9

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Prioritization Results: Town of Weare

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
5242	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
5241	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
5226	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
5225	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
5184	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	9
9428	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
9421	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	9
9414	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
9413	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
5284	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
5224	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
1292	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
1285	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	Yes	2	9
1100	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
1099	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
1067	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
1066	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
929	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
910	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
902	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
898	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
5254	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	8
999973	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999951	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
924	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
913	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	8
1095	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	7
1112	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	7
923	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	7
920	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	7
909	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	7
9456	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
9455	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
9438	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
9437	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
9436	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
9419	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
5183	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
1291	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
935	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
911	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
903	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
899	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
896	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7

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Prioritization Results: Town of Weare

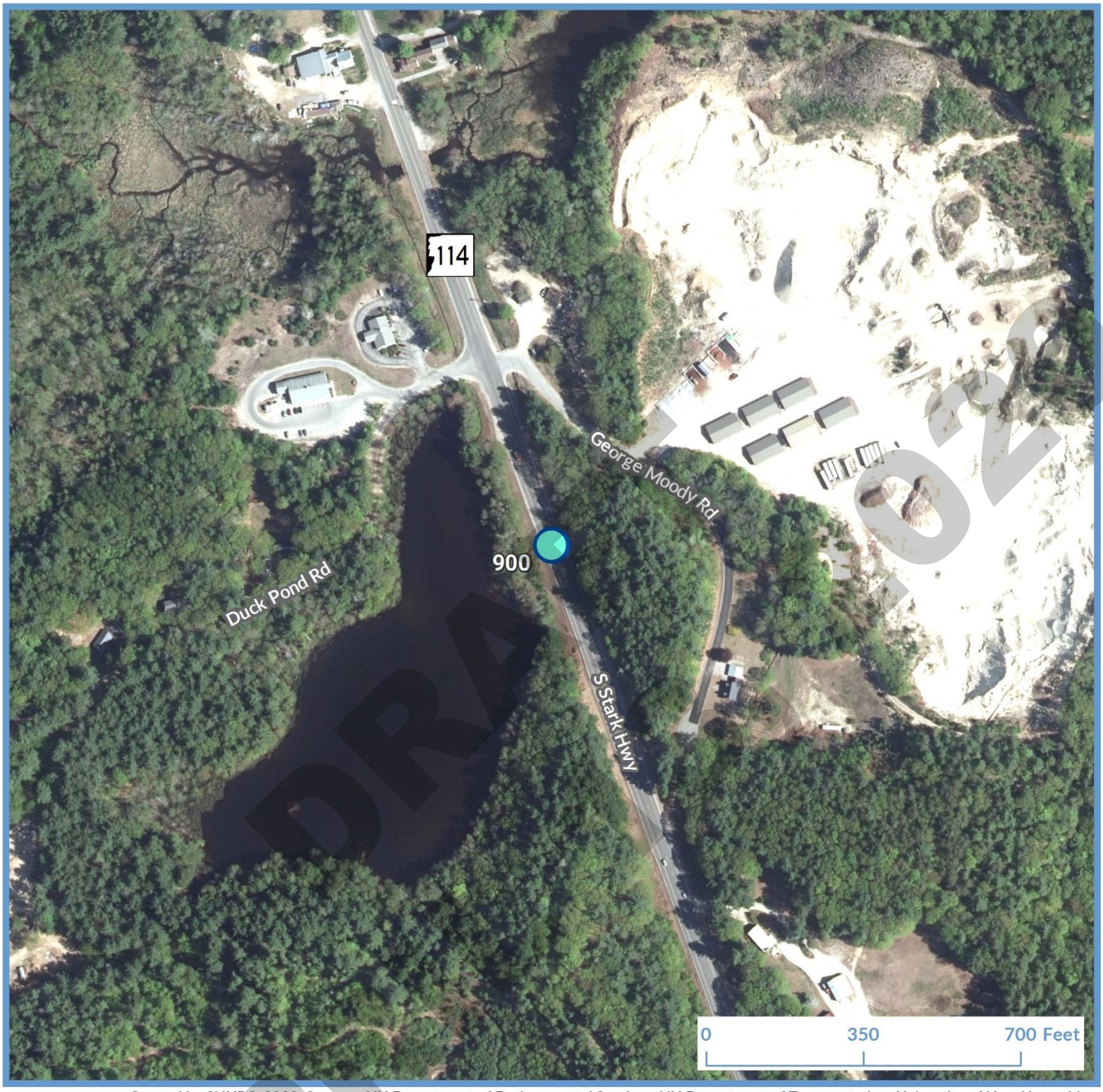
SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
5248	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
5197	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
1114	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	6
928	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
927	AADT<5,000	2	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	6
1096	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Metal	2	No	0	6
1259	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1093	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
1070	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
937	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
936	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
932	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	5
5274	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
5216	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	5
5215	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
5182	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1290	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1288	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	Yes	2	5
1258	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1102	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
1097	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
931	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
918	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
917	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
915	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
912	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	5
5281	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	4
5256	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
5252	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
5251	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
5235	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
1263	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
1098	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
1081	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
930	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
9468	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9467	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9458	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9457	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9454	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9453	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9452	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9451	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9450	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3

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Prioritization Results: Town of Weare

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
9449	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9448	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9441	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9440	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9439	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9422	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
9415	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5246	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5244	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5243	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5240	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1289	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1286	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1257	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1255	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1115	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1113	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1109	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1094	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1092	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1091	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1090	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1089	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
933	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
916	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
914	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
897	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
869	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
1111	AADT<5,000	2	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	2
1254	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
1108	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
1105	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Metal	2	No	0	2
921	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
904	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0

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Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

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Weare, NH		Stream Crossing Detail Sheet			SADES ID 900
Prioritization Score	**28**	Traffic Volume	<10,000	Crossing Type	Stream
		Asset Manager ID'd	No	Road Name	Route 114 (S. Stark Highway)
		Flood Hazard ID'd	Yes	Stream Name	No Data
		Flood Zone Category	100-Yr Flood Zone	Structure Type	Alum. Corrugated Round Culv.
		Culvert Condition	Poor	Crossing Width	No Data
		10-Yr Hydraulic Vuln.	Unknown	Open Height	No Data
		Crossing Material	Metal	Obstruction	No Data
		Beaver Activity	No	Assessment Date	5/29/2012

SNHPC

Detail Sheet Created: January 24, 2020



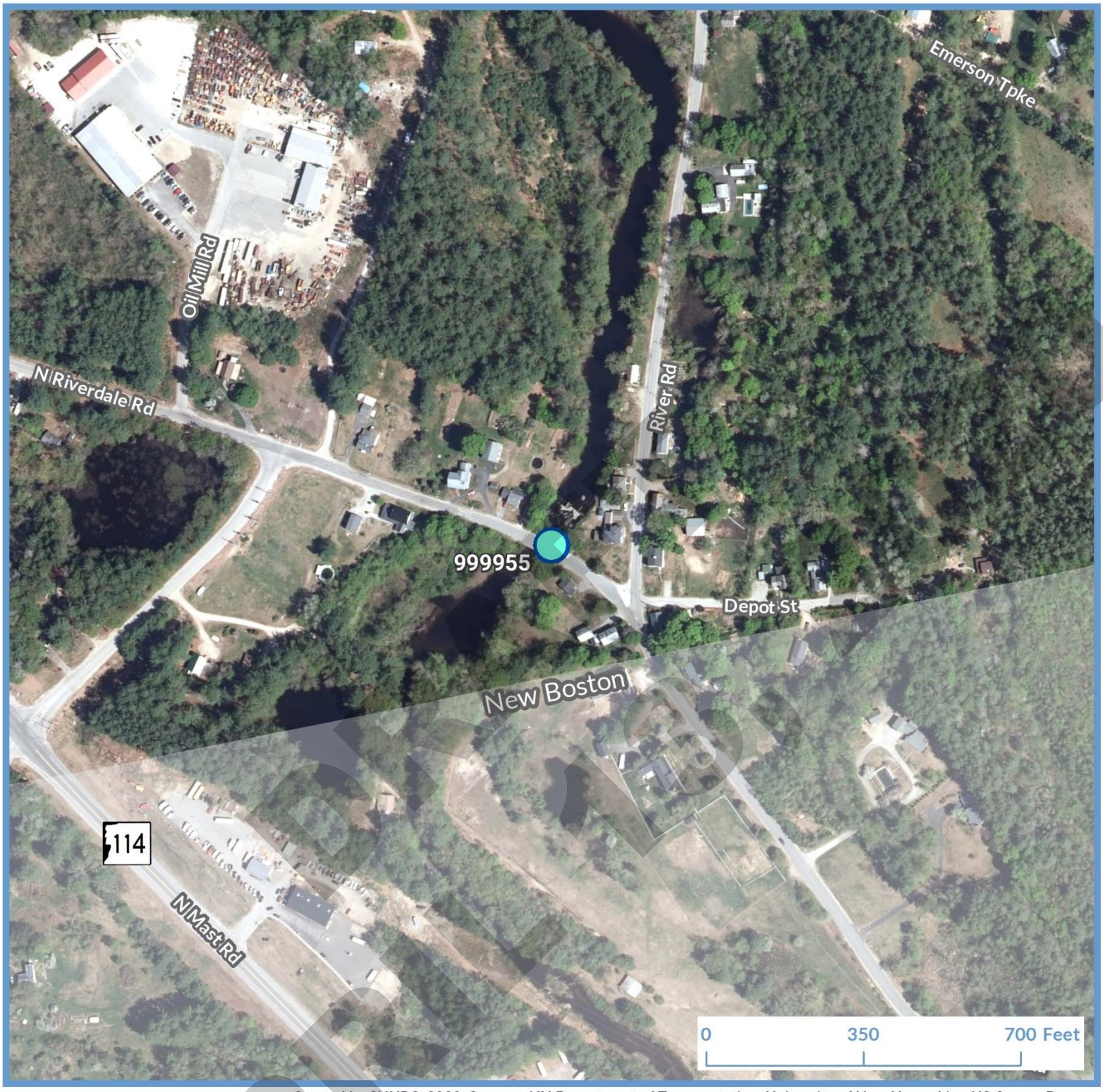
Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

APRIL 2020

Weare, NH		Stream Crossing Detail Sheet			SADES ID 901
Prioritization Score	**28**	Traffic Volume	<10,000	Crossing Type	Stream
		Asset Manager ID'd	No	Road Name	Duck Pond Road
		Flood Hazard ID'd	Yes	Stream Name	No Data
		Flood Zone Category	100-Yr Flood Zone	Structure Type	Alum. Corrugated Elliptical Culv
		Culvert Condition	Poor	Crossing Width	2.00'
		10-Yr Hydraulic Vuln.	Unknown	Open Height	No Data
		Crossing Material	Metal	Obstruction	Deformation of Culvert
		Beaver Activity	No	Assessment Date	5/25/2012

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Detail Sheet Created: January 24, 2020



Created by SNHPC, 2020. Sources: NH Department of Transportation; University of New Hampshire; US Census Bureau.

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Weare, NH		Stream Crossing Detail Sheet			SADES ID 999955
Prioritization Score	**27**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Stream**
SNHPC		**Asset Manager ID'd**	**Yes**	**Road Name**	**North Riverdale Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Data**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**No Data**
		Culvert Condition	**Unknown**	**Crossing Width**	**No Data**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**No Data**
Detail Sheet Created: January 24, 2020		**Beaver Activity**	**No**	**Assessment Date**	**Not Yet Surveyed**

Prioritization Score Statistical Summary: Town of Weare

Traffic Volumes

Count	Totals
AADT>=30,000	0
AADT<30,000	0
AADT<20,000	0
AADT<10,000	10
AADT<5,000	30
AADT<1,000	126
TOTAL:	166

10-Yr Vulnerability

Category	Count
Overtop	1
Vulnerable	1
Unknown	133
Pass	1
Not Applicable	30
TOTAL:	166

Beaver Activity

Yes	8
No	158
TOTAL:	166

Total Crossings

Region	1422
Town	166

Flood Zone

Count	Totals
Floodway	0
100-Year Flood Zone	80
500-Year Flood Zone	0
Minimal Hazard	86
TOTAL:	166

Structure Material

Metal	51
Not Metal	115
TOTAL:	166

Flood Hazard

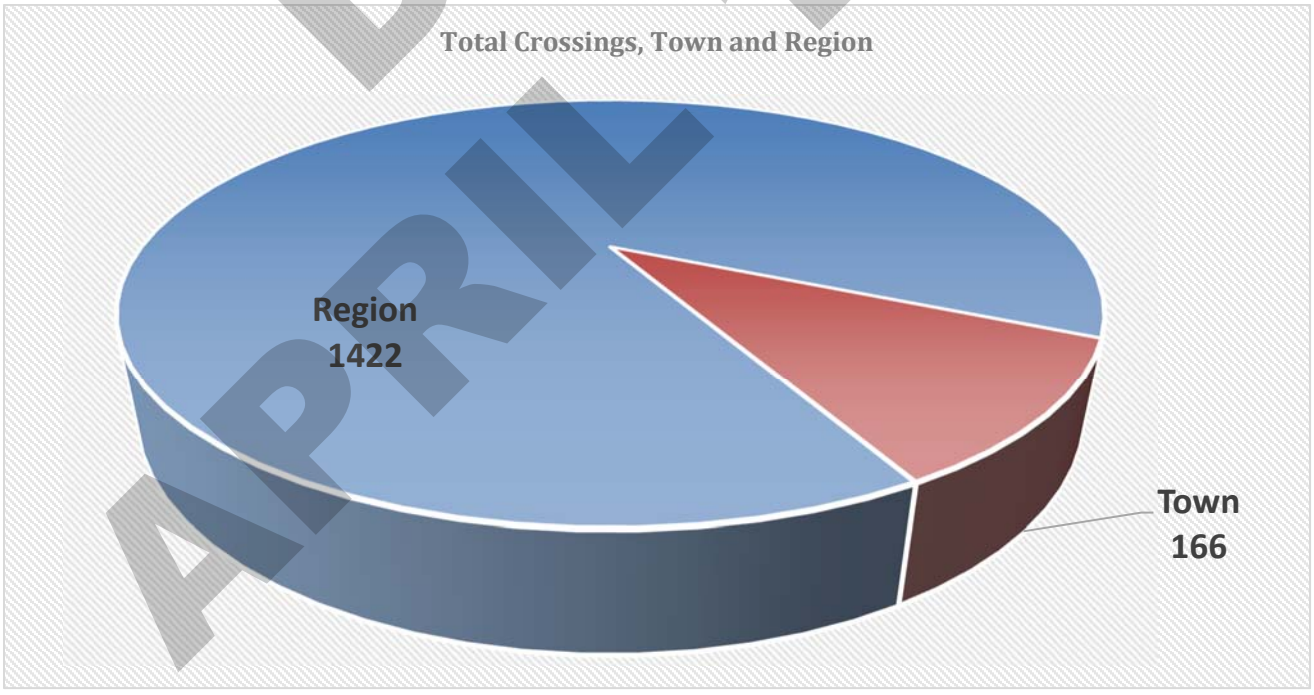
ID'd	23
Not ID'd	143
TOTAL:	166

Culvert Condition

Poor	6
Fair	1
Good	147
Unknown	12
TOTAL:	166

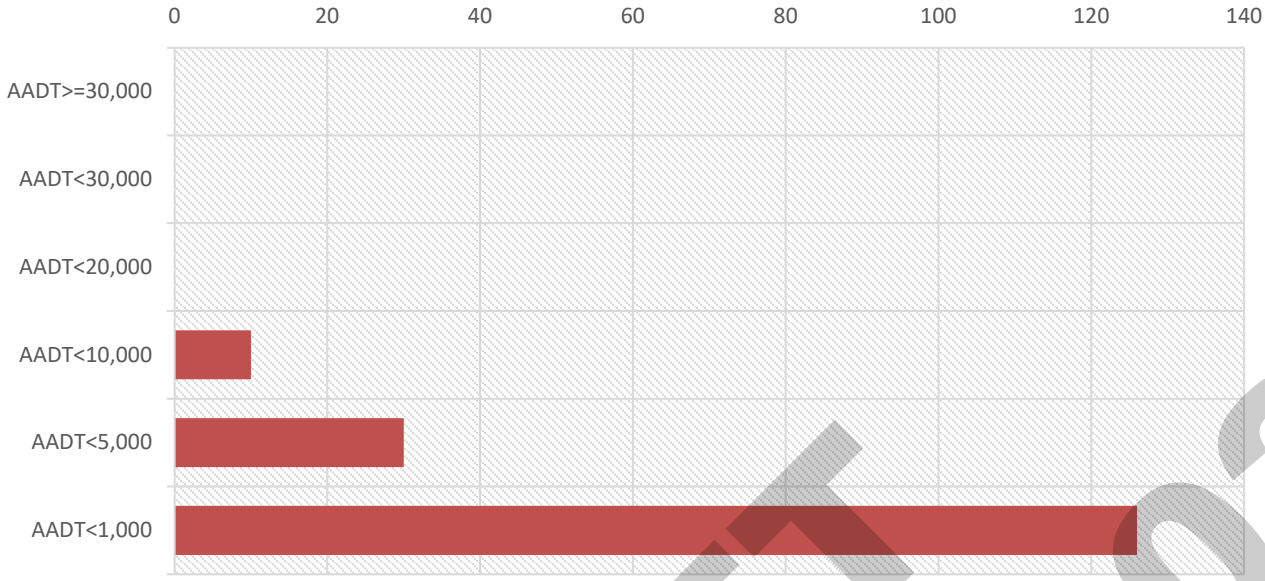
Asset Manager

ID'd	18
Not ID'd	148
TOTAL:	166

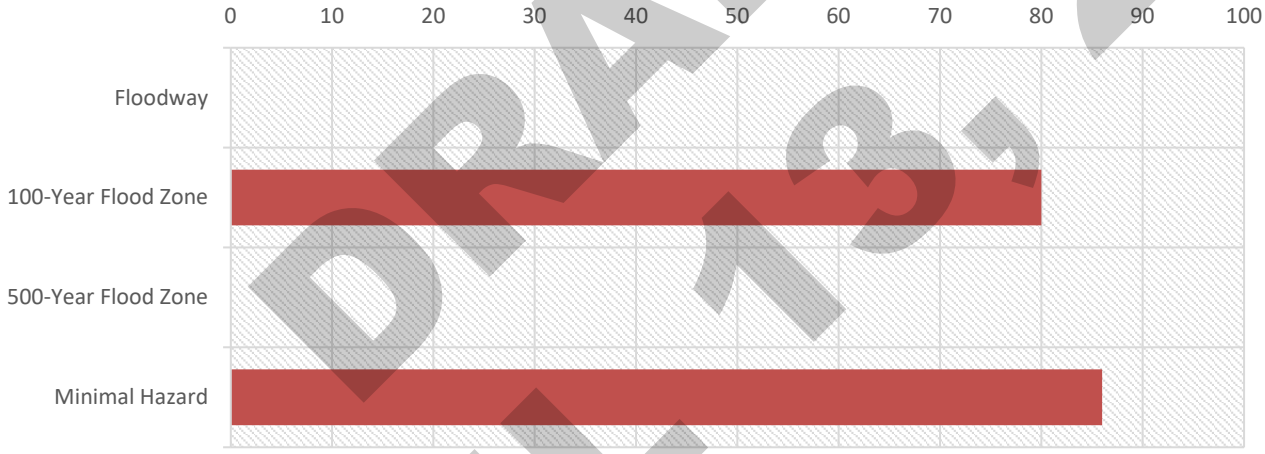


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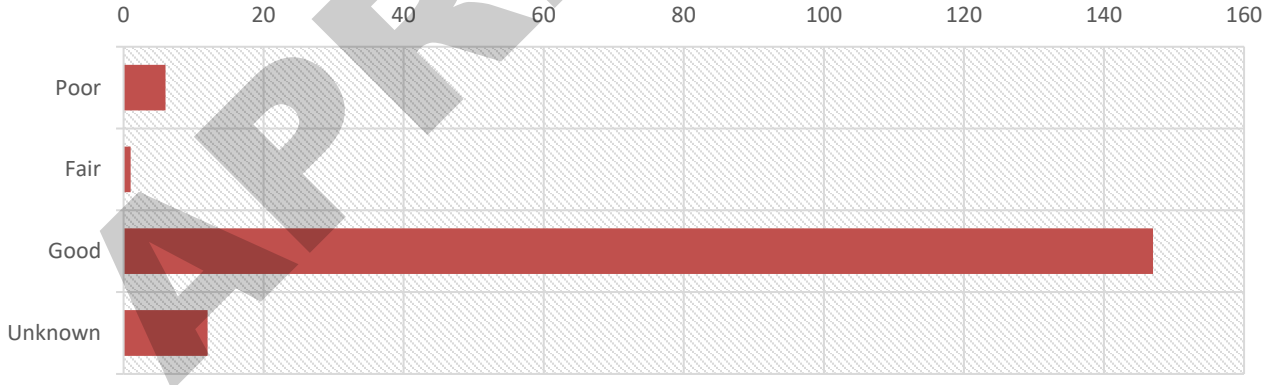
Muni. Count by Traffic Volume Category



Muni. Count by FEMA Flood Zone Categorey

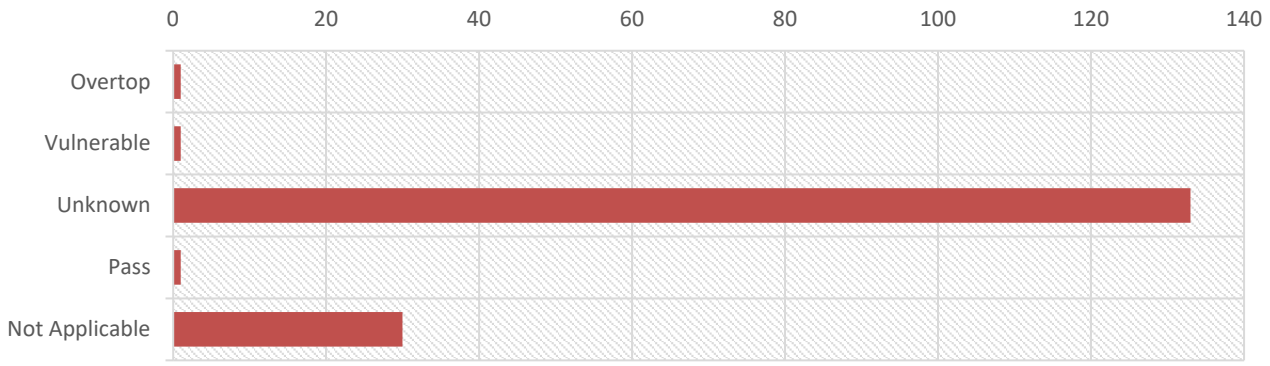


Muni. Count by Stream Crossing Condition

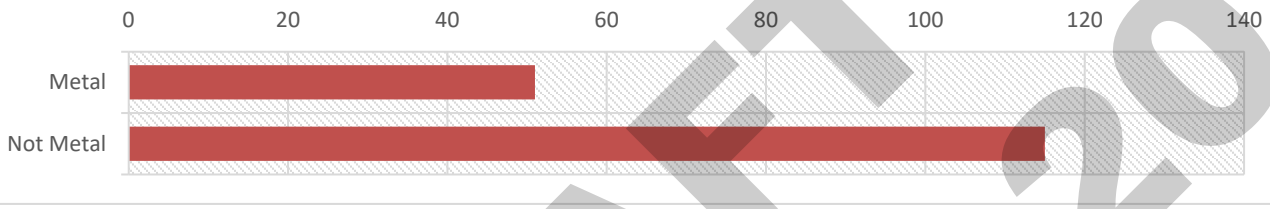


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APRIL 13, 2020

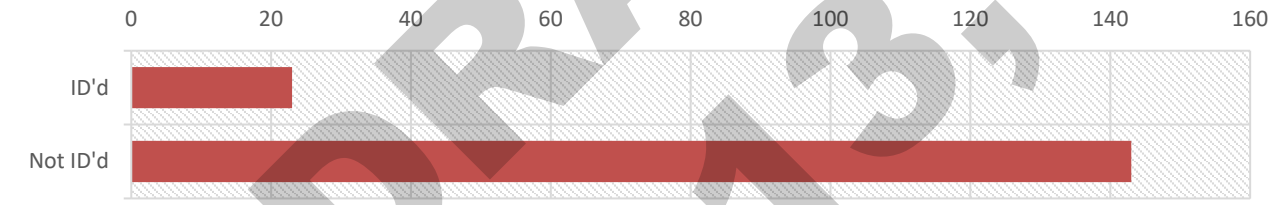
Muni. Count by 10-Yr Vulnerability



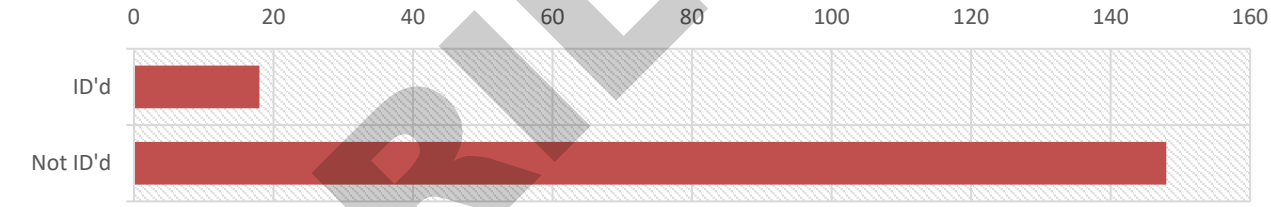
Muni. Count By Structure Material



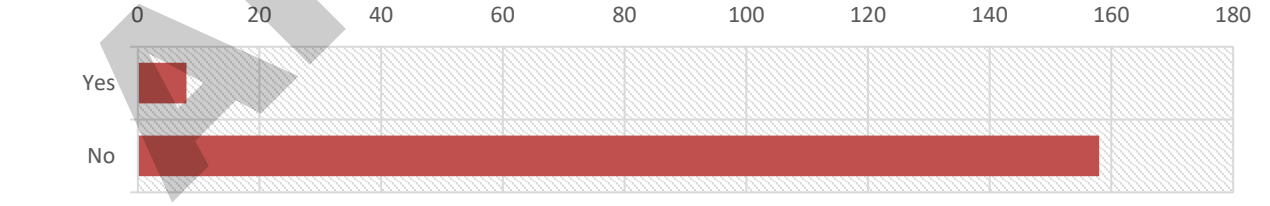
Muni. Count by Identified Flood Hazard History



Muni. Count by Asset Manager Identification



Total Region Count by Beaver Activity



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APRIL

Prioritization Results: Town of Windham

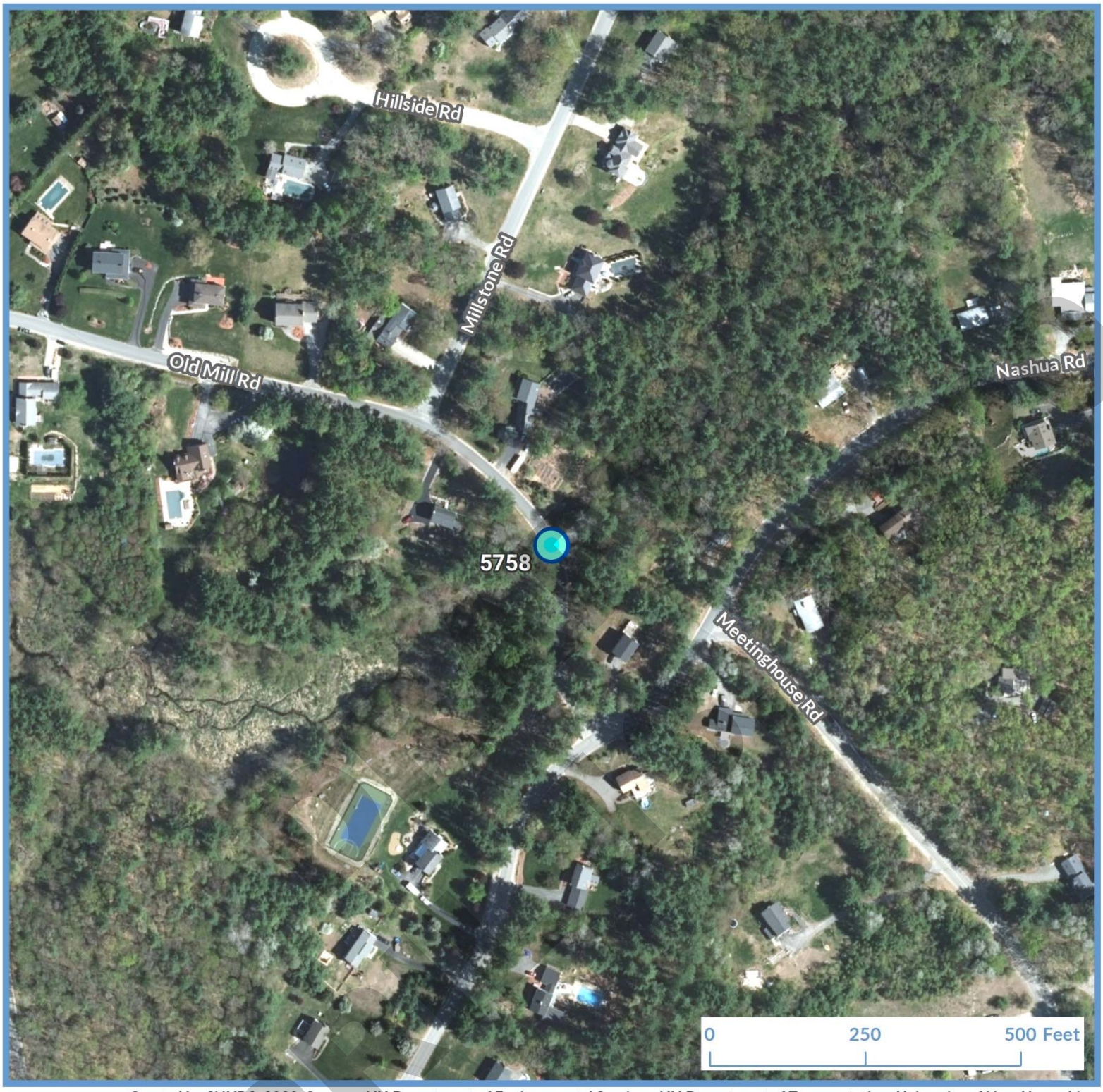
SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
7199	AADT<20,000	6	No	0	Yes	5	100-Year Flood Zone	4	Fair	5	Overtop	5	Not Metal	0	No	0	25
6943	AADT<1,000	0	Yes	10	Yes	5	Floodway	5	Fair	5	Not Applicable	0	Not Metal	0	No	0	25
5758	AADT<1,000	0	No	0	Yes	5	Floodway	5	Poor	10	Unknown	3	Metal	2	No	0	25
6982	AADT<1,000	0	Yes	10	No	0	Floodway	5	Fair	5	Unknown	3	Not Metal	0	No	0	23
999963	AADT<30,000	8	No	0	No	0	Floodway	5	Unknown	5	Unknown	3	Not Metal	0	No	0	21
15120	AADT<30,000	8	No	0	No	0	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	19
7058	AADT<10,000	4	No	0	No	0	500-Year Flood Zone	3	Fair	5	Overtop	5	Metal	2	No	0	19
999989	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	18
7062	AADT<30,000	8	No	0	No	0	Floodway	5	Good	0	Unknown	3	Metal	2	No	0	18
6941	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Poor	10	Unknown	3	Metal	2	No	0	18
999961	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	16
7197	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	15
7063	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Vulnerable	4	Metal	2	No	0	15
7200	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	14
7198	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	14
15122	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	No	0	14
15121	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Poor	10	Not Applicable	0	Not Metal	0	No	0	14
6980	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Poor	10	Vulnerable	4	Not Metal	0	No	0	14
7196	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	13
999992	AADT<5,000	2	No	0	No	0	500-Year Flood Zone	3	Unknown	5	Unknown	3	Not Metal	0	No	0	13
999880	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	13
7060	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	13
7022	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Vulnerable	4	Not Metal	0	No	0	13
999959	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	12
6981	AADT<5,000	2	No	0	No	0	Floodway	5	Fair	5	Not Applicable	0	Not Metal	0	No	0	12
999988	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
999970	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Unknown	5	Unknown	3	Not Metal	0	No	0	12
9173	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Fair	5	Unknown	3	Not Metal	0	No	0	12
2836	AADT<30,000	8	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	11
7056	AADT<20,000	6	No	0	No	0	Minimal Hazard	0	Fair	5	Pass	0	Not Metal	0	No	0	11
7064	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Pass	0	Metal	2	No	0	11
2832	AADT>=30,000	10	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	10
7026	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	10
2701	AADT<20,000	6	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	10
7193	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
7061	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
6944	AADT<1,000	0	No	0	Yes	5	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	10
5763	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Unknown	3	Metal	2	No	0	10
9303	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	9
9172	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Unknown	5	Not Applicable	0	Not Metal	0	No	0	9
7018	AADT<10,000	4	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	9
7055	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Metal	2	No	0	9
7025	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Overtop	5	Not Metal	0	No	0	9
5762	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9

DRAFT 8/18/2020

Prioritization Results: Town of Windham

SADES ID	Annual Avg. Daily Trips (AADT)	AADT Score	Asset Mgr ID'd Crossing	Asset Mgr ID Score	History of Flood Hazard	Hazard Score	Flood Zone Category (FEMA)	Zone Score	Culvert Condition	Condition Score	10yr Hydraulic Vulnerability	Vuln. Score (10yr)	Culvert Material	Metal Score	Beaver Activity	Beaver Score	Total Score
5477	AADT<1,000	0	No	0	Yes	5	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	9
7020	AADT<10,000	4	No	0	No	0	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	8
999985	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999960	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999881	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
999878	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
9175	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Unknown	5	Unknown	3	Not Metal	0	No	0	8
7024	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Vulnerable	4	Not Metal	0	No	0	8
5760	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Unknown	3	Not Metal	0	No	0	8
5479	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Metal	2	No	0	8
7021	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	7
5518	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	7
5483	AADT<5,000	2	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Not Metal	0	No	0	7
5765	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Not Applicable	0	Metal	2	No	0	7
5764	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
5756	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Unknown	3	Not Metal	0	No	0	7
5481	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Unknown	3	Not Metal	0	No	0	6
7059	AADT<1,000	0	No	0	Yes	5	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	5
7023	AADT<1,000	0	No	0	No	0	Floodway	5	Good	0	Pass	0	Not Metal	0	No	0	5
6978	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
6977	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Overtop	5	Not Metal	0	No	0	5
7194	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
7101	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
7100	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
7057	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Pass	0	Not Metal	0	No	0	4
7019	AADT<1,000	0	No	0	No	0	100-Year Flood Zone	4	Good	0	Not Applicable	0	Not Metal	0	No	0	4
6942	AADT<1,000	0	No	0	No	0	500-Year Flood Zone	3	Good	0	Pass	0	Not Metal	0	No	0	3
5482	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5480	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
5478	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
2834	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
2833	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Unknown	3	Not Metal	0	No	0	3
7195	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	Yes	2	2
7192	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
7102	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6979	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
6940	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Pass	0	Not Metal	0	No	0	0
5759	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0
2835	AADT<1,000	0	No	0	No	0	Minimal Hazard	0	Good	0	Not Applicable	0	Not Metal	0	No	0	0

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Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Windham, NH		Stream Crossing Detail Sheet			SADES ID 5758
Prioritization Score	**25**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Stream**
SNHPC Detail Sheet Created: January 24, 2020		**Asset Manager ID'd**	**No**	**Road Name**	**Duck Pond Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**No Data**
		Flood Zone Category	**Floodway**	**Structure Type**	**Alum. Corrugated Elliptical Culv**
		Culvert Condition	**Poor**	**Crossing Width**	**2.00'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Metal**	**Obstruction**	**Deformation of Culvert**
		Beaver Activity	**No**	**Assessment Date**	**6/21/2016**

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Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Windham, NH		Stream Crossing Detail Sheet			SADES ID 6943
Prioritization Score	**25**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Wetland**
		Asset Manager ID'd	**Yes**	**Road Name**	**Moeckel Road**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Golden Brook**
		Flood Zone Category	**Floodway**	**Structure Type**	**Bridge with Abutments**
		Culvert Condition	**Fair**	**Crossing Width**	**15.00'**
		10-Yr Hydraulic Vuln.	**Not Applicable**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**Sediment**
		Beaver Activity	**No**	**Assessment Date**	**8/4/2016**

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Detail Sheet Created: January 24, 2020

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Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

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Windham, NH		Stream Crossing Detail Sheet			SADES ID 7199
Prioritization Score	**25**	**Traffic Volume**	**<20,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**No**	**Road Name**	**Route 28 (Rockingham Road)**
		Flood Hazard ID'd	**Yes**	**Stream Name**	**Flatrock Brook**
		Flood Zone Category	**100-Yr Flood Zone**	**Structure Type**	**Concrete Box Culvert**
		Culvert Condition	**Fair**	**Crossing Width**	**4.00'**
		10-Yr Hydraulic Vuln.	**Overtop**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**8/15/2016**

NEW HAMPSHIRE SOUTHERN PLANNING COMMISSION

SNHPC

Detail Sheet Created: January 24, 2020



Created by SNHPC, 2020. Sources: NH Department of Environmental Services; NH Department of Transportation; University of New Hampshire.

Windham, NH		Stream Crossing Detail Sheet			SADES ID 6982
Prioritization Score	**23**	**Traffic Volume**	**<1,000**	**Crossing Type**	**Stream**
		Asset Manager ID'd	**Yes**	**Road Name**	**Golden Brook Road**
		Flood Hazard ID'd	**No**	**Stream Name**	**Golden Brook**
		Flood Zone Category	**Floodway**	**Structure Type**	**Concrete Bridge w/Abutments**
		Culvert Condition	**Fair**	**Crossing Width**	**13.33'**
		10-Yr Hydraulic Vuln.	**Unknown**	**Open Height**	**No Data**
		Crossing Material	**Not Metal**	**Obstruction**	**None**
		Beaver Activity	**No**	**Assessment Date**	**8/5/2016**

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APPROVED

Prioritization Score Statistical Summary: Town of Windham

Traffic Volumes

Count	Totals
AADT>=30,000	2
AADT<30,000	5
AADT<20,000	7
AADT<10,000	7
AADT<5,000	5
AADT<1,000	57
TOTAL:	83

10-Yr Vulnerability

Category	Count
Overtop	8
Vulnerable	6
Unknown	33
Pass	8
Not Applicable	28
TOTAL:	83

Beaver Activity

Yes	1
No	82
TOTAL:	83

Total Crossings

Region	1505
Town	83

Flood Zone

Count	Totals
Floodway	16
100-Year Flood Zone	28
500-Year Flood Zone	7
Minimal Hazard	32
TOTAL:	83

Structure Material

Metal	10
Not Metal	73
TOTAL:	83

Flood Hazard

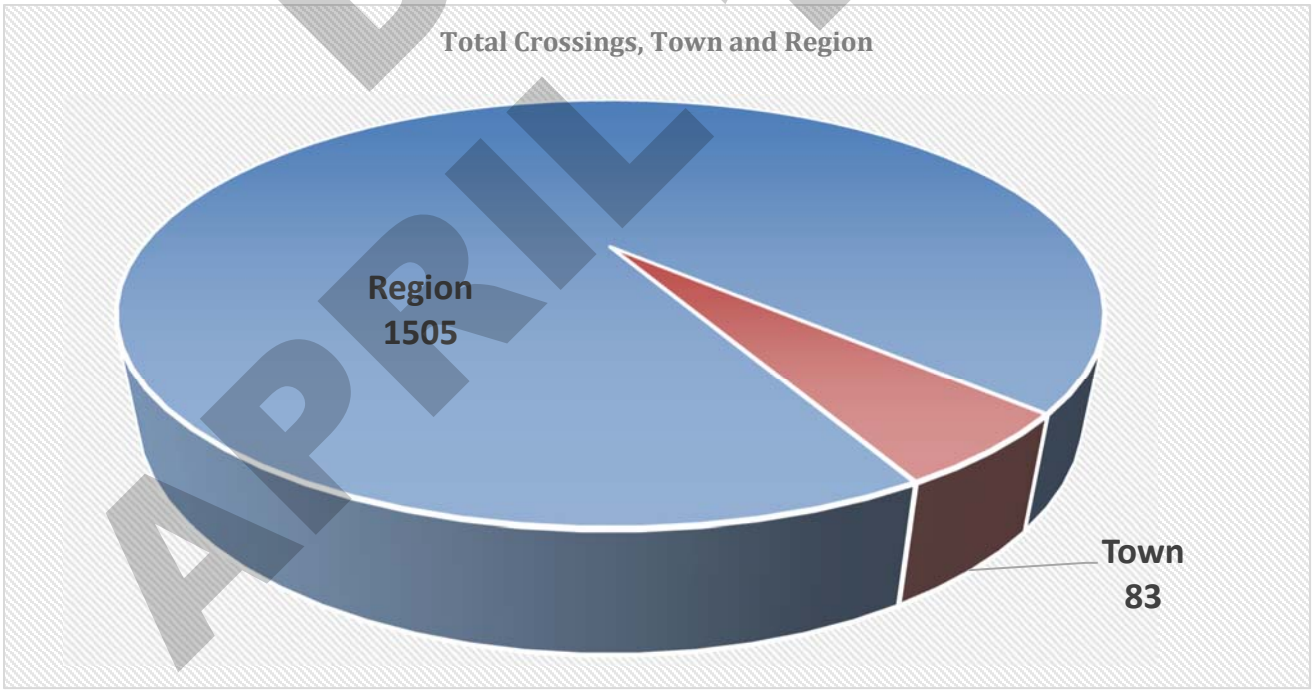
ID'd	14
Not ID'd	69
TOTAL:	83

Culvert Condition

Poor	5
Fair	8
Good	54
Unknown	16
TOTAL:	83

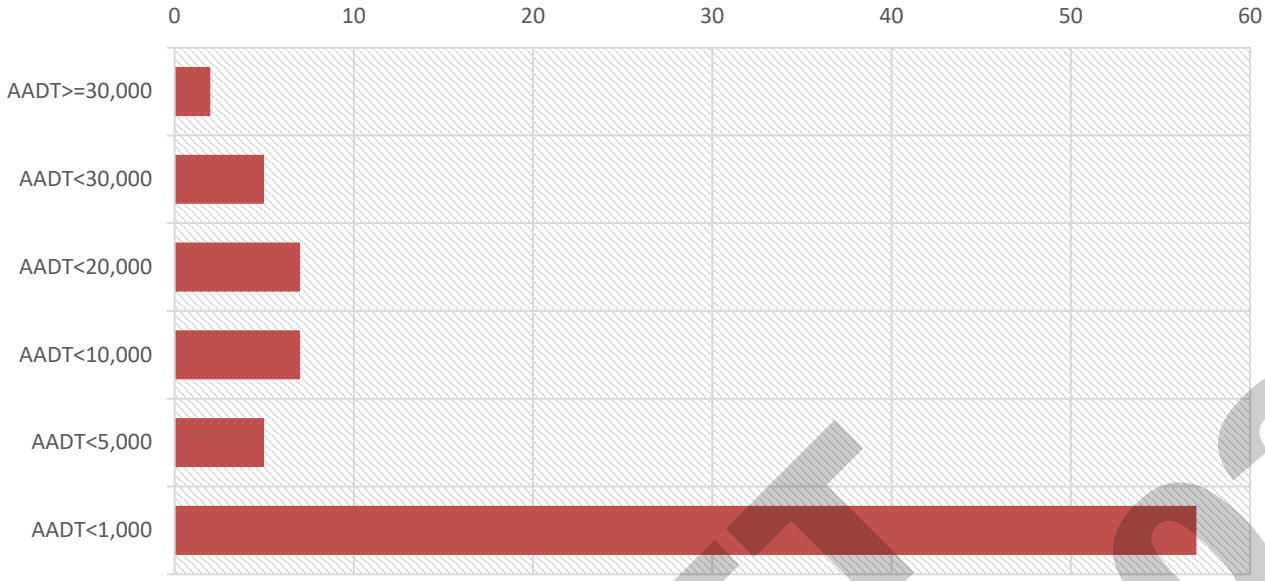
Asset Manager

ID'd	2
Not ID'd	81
TOTAL:	83

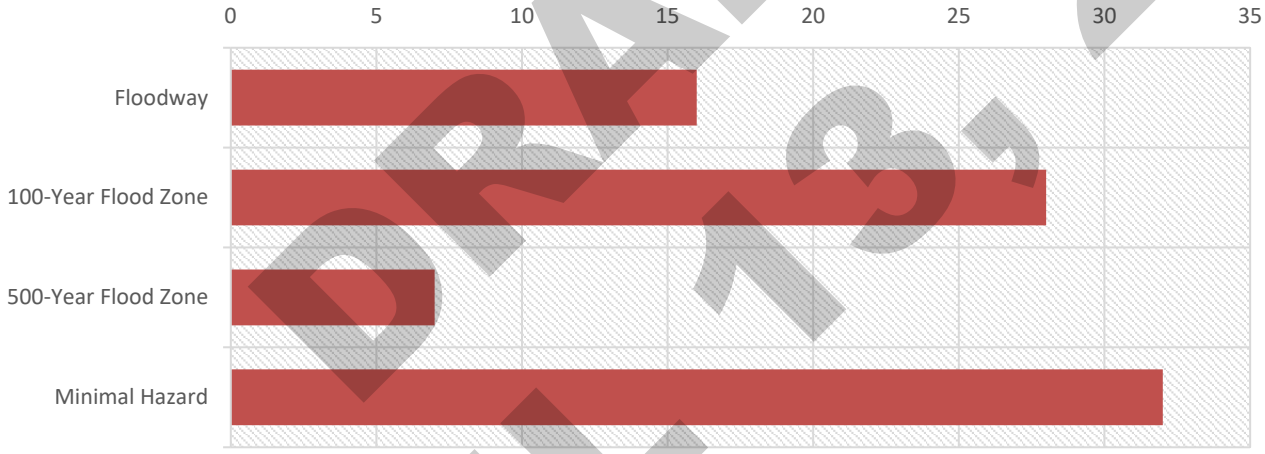


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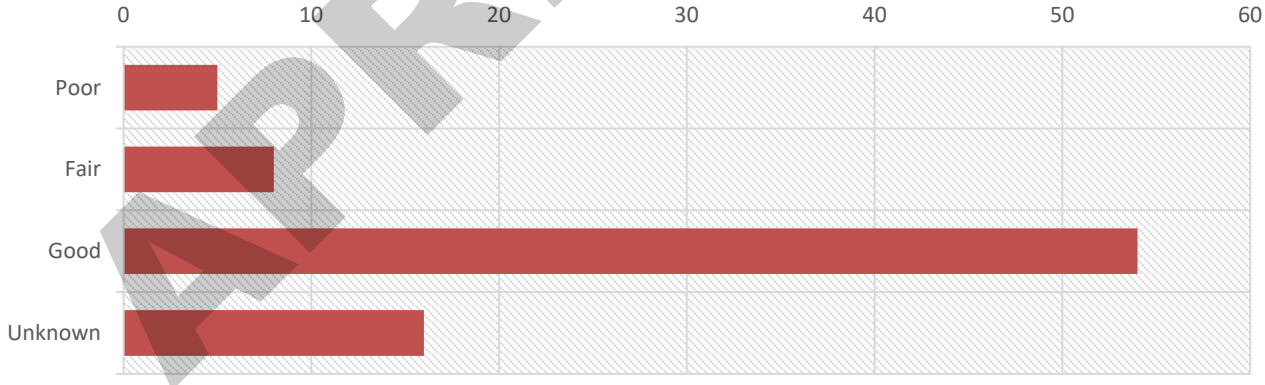
Muni. Count by Traffic Volume Category



Muni. Count by FEMA Flood Zone Categorey

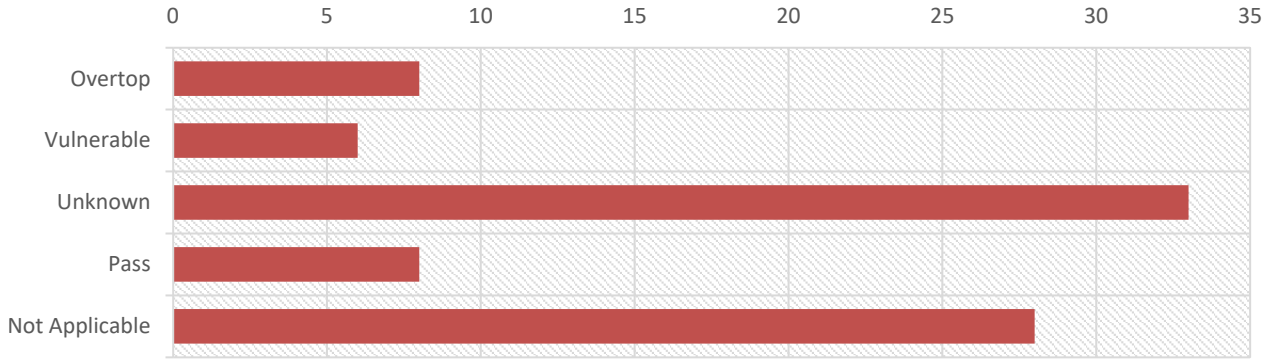


Muni. Count by Stream Crossing Condition

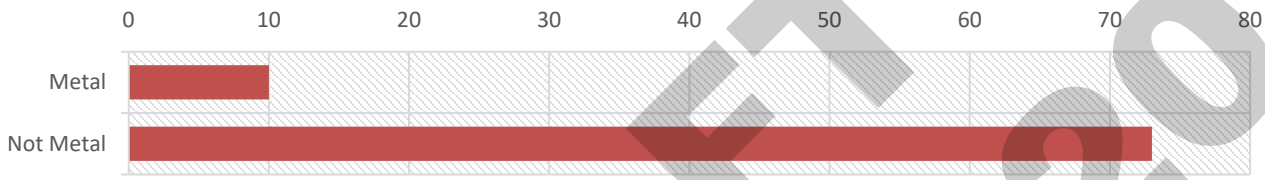


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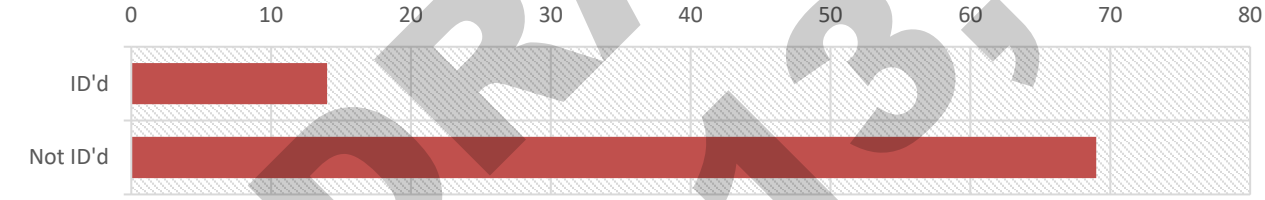
Muni. Count by 10-Yr Vulnerability



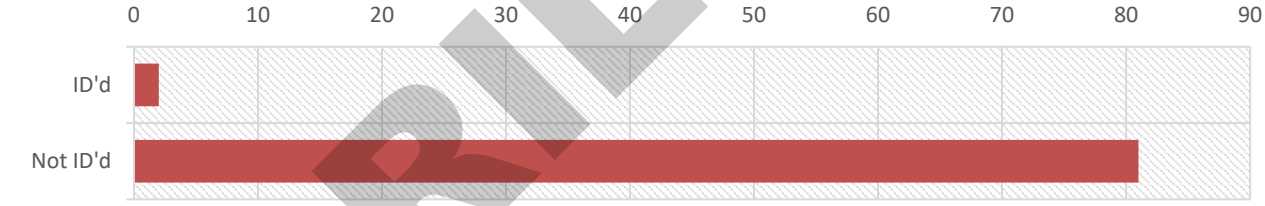
Muni. Count By Structure Material



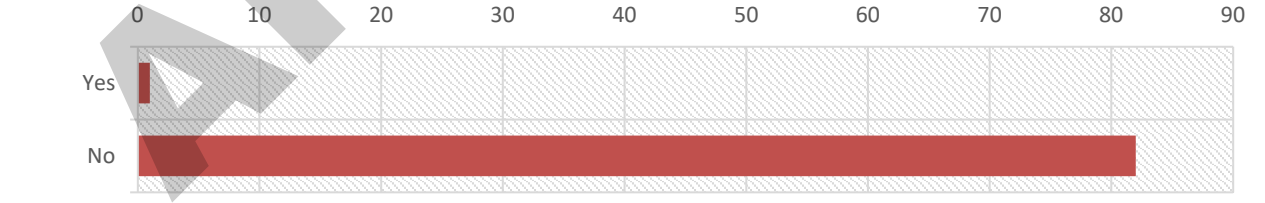
Muni. Count by Identified Flood Hazard History



Muni. Count by Asset Manager Identification



Total Region Count by Beaver Activity



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Appendix F: Glossary of Terms

Adaptation *- Adjustment in natural or human systems in anticipation of or response to a changing environment in a way that effectively uses beneficial opportunities or reduces negative effects.*

Adaptive Capacity *- Refers to the ability of a transportation asset or system to adjust, repair, or flexibly respond to damage caused by climate variability or extreme weather.*

Asset *- Throughout the Framework, the term asset refers to both physical transportation infrastructure such as roads, rails, and bridges as well as support facilities, vehicles, intelligent transportation systems, and ecosystem-related projects.*

Climate Change *- Climate change refers to any significant change in the measures of climate lasting for an extended period of time. Climate change includes major variations in temperature, precipitation, or wind patterns, among other environmental conditions, that occur over several decades or longer. Changes in climate may manifest as a rise in sea level, as well as increase the frequency and magnitude of extreme weather events now and in the future.*

Climate Projection *- A projection of the response of the climate system to emissions scenarios of GHGs often based upon simulations by climate models.*

Climate Stressor *- The magnitude of the climate variable that may harm the transportation system or asset.*

Climate Variable *- A characteristic of the climate that affects the transportation system. The climate variables most often analyzed in a transportation vulnerability assessment are temperature, precipitation, sea level, and river discharge.*

Downscaling *- A method to derive local-to-regional scale information from larger-scale models or data analyses.*

Emissions Scenario *- A plausible representation of the future development of emissions of GHGs based on a coherent and internally consistent set of assumptions about driving forces (such as technological change, demographic and socioeconomic development) and their key relationships. Concentration scenarios, derived from emissions scenarios, are used as input to a climate model to compute climate projections.*

Exposure *- Refers to whether an asset or system is located in an area experiencing direct effects of climate variability and extreme weather events. Exposure is a prerequisite for vulnerability.*

Extreme Weather Events *- Extreme weather events can include significant anomalies in temperature, precipitation and winds and can manifest as heavy precipitation and flooding, heatwaves, drought, wildfires and windstorms (including tornadoes and tropical storms). Consequences of extreme weather events can include safety concerns, damage, destruction, and/or economic loss.*

Greenhouse Gases *(GHGs) - Natural or manmade gases that trap heat in the atmosphere and contribute to the greenhouse effect. The primary GHGs emitted by the transportation sector are carbon dioxide, nitrous oxide, methane, and hydrofluorocarbons.*

Hydraulic Vulnerability *(NH DES) – This describes how well a stream crossing transports flows during storm events and can be evaluated based on predictions of hydraulic capacity or flood event records.*

Resilience *- Resilience or resiliency is the ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions.*

Risk *- A combination of the likelihood that an asset will experience a particular climate impact, and the severity or consequence of that impact.*

Sensitivity *- Refers to how an asset or system responds to, or is affected by, exposure to a climate change stressor. A highly sensitive asset will experience a large degree of impact if the climate varies even a small amount, where as a less sensitive asset could withstand high levels of climate variation before exhibiting any response.*

Stream Crossing *– Any location where a road intersects a waterway requires a stream crossing to convey the water under the road. For the purposes of this report, the term "Stream Crossing" refers mainly to culverts and smaller bridges. Smaller bridges are defined as those less than 20' in span.*

Vulnerability *- The degree to which a system is susceptible to, or unable to cope with adverse effects of climate change or extreme weather events. In the transportation context, climate change vulnerability is a function of a transportation system's exposure to climate effects, sensitivity to climate effects, and adaptive capacity.*

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