Flood Vulnerability Assessment

Town of Wayne, ME

PREPARED FOR

Town of Wayne
14 Kents Hill Rd
Wayne, ME 04284
207.685.4983

PREPARED BY

600 Southborough Drive, Suite 100
South Portland, ME 04106-6915
207.889.3150

JULY 7, 2026

Table of Contents

Appendices

List of Tables

List of Figures

List of Acronyms

Acronyms	Definitions
AE	Flood Zone AE (FEMA Special Flood Hazard Area with Base Flood Elevations)
AEP	Annual Exceedance Probability
BFEs	Base Flood Elevations
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map (FEMA)
FIS	Flood Insurance Study (FEMA)
FMA	Flood Mitigation Assistance (FEMA grant program)
GIS	Geographic Information System
HMGP	Hazard Mitigation Program (FEMA)
HMP	Hazard Mitigation Plan
LiDAR	Light Detection and Ranging
Maine DEP	Maine Department of Environmental Protection
NFIP	National Flood Insurance Program
NOAA	National Oceanic and Atmospheric Association
SVI	Maine Social Vulnerability Index

Executive Summary

This Flood Vulnerability Assessment is a planning-level assessment that evaluates inland flooding hazards in the Town of Wayne associated with extreme storm events from changing climate conditions. The assessment considers multiple drivers of flooding, including intense rainfall, lake and river backwater effects, and limitations in aging or undersized drainage and stormwater infrastructure. Its purpose is to identify where flood exposure, functional consequence, and limited adaptive capacity intersect most strongly in Wayne and to provide a planning-level basis for resilience investments, emergency preparedness, and long-term municipal decision-making.

Wayne's flood risk is shaped by both local infrastructure conditions and the Town's lake, pond, stream, and outlet systems. Historical flooding, including major events in March 1936, December 1973, and April 1987, demonstrates the Town's sensitivity to watershed-scale runoff, outlet constraints, and backwater effects involving Androscoggin Lake and the Dead River. These dynamics remain important under current conditions and are expected to become more significant over time as climate change contributes to increased levels of precipitation, more variable seasonal hydrology, and greater stress on drainage systems, stream crossings, shorelines, and low-lying access routes.

To evaluate vulnerability, the project team developed a geospatial inventory of Town-owned and other critical community assets; screened those assets for flood exposure using the Federal Emergency Management Agency's (FEMA) flood mapping, National Oceanic and Atmospheric Administration (NOAA) light detection and ranging (LiDAR)-derived elevation data, and planning-level higher flood conditions; and evaluated exposed assets using a qualitative framework based on sensitivity and adaptive capacity. Sensitivity and adaptive capacity scores were informed by local knowledge of the vulnerability assessments Steering Committee which was formed specifically for this project, historical flood experience, and stakeholder input during a February 26, 2026 vulnerability assessment workshop. The resulting ratings are comparative and planning-level in nature and are intended to support prioritization rather than predict site-specific flood damages or engineering performance.

The assessment finds that Wayne's highest vulnerabilities are concentrated in a relatively small number of assets and corridors where flooding can isolate residents, disrupt emergency response, or damage critical infrastructure. These include single-access and near-single-access roads such as Coolidge Road, Gott Road, Leadbetter Road, and portions of North Wayne Road, Old Winthrop Road, and Pond Road; key school, commuter, and emergency travel routes such as Mount Pisgah Road, Walton Road, Main Street, and Leeds Road/Route 219; high-priority culvert and drainage crossings on Lord Road, North Wayne Road, Walton Road, and Coolidge Road; bridge crossings at Tempy Bridge (Mount Pisgah Road culvert), the state-owned North Wayne

(Walton Road) and Main Street (Route 133) Bridges; the Wayne Village Dam and Lovejoy Pond Dam; lake-influenced shoreline and access areas around Androscoggin Lake, Pocasset Lake, Lovejoy Pond, Wilson Pond, Dexter Pond, and Berry Pond; and the Ladd Recreation Center as a community facility with flood-prone access and important emergency and public functions.

Beyond infrastructure, the assessment also identifies broader social and natural resource considerations that affect resilience. Although Wayne ranks relatively low overall on the Maine Social Vulnerability Index, certain local characteristics, including an older population, lower-income households, and limited vehicle access for some residents, may increase challenges during flood events, particularly where neighborhoods depend on vulnerable access routes. Flooding also threatens the Town's natural and water resources through shoreline erosion, sediment and nutrient transport, stress on septic systems in flood-prone areas, and water quality impacts to lakes, ponds, wetlands, streams, and riparian corridors.

The report recommends a phased resilience strategy centered on the Town's priority focus areas. Near-term actions include maintaining and updating the Town's Geographic Information System (GIS)-based asset inventory, documenting flood events and asset performance, improving routine inspection and maintenance of culverts and other flood-prone assets, strengthening emergency access and detour planning, and developing scopes and cost estimates for high priority projects. Longer-term actions include targeted capital improvements to vulnerable roads, culverts, bridges, dams, and lake-adjacent infrastructure; continued coordination with Maine Department of Transportation (MaineDOT) and watershed partners; support for shoreline stabilization and water quality protection; and integration of resilience goals into capital planning, hazard mitigation planning, and future updates to local land use and floodplain management tools.

This assessment is intended to serve as a practical planning resource for the Town of Wayne and is expected to be incorporated into the Town's upcoming Comprehensive Plan revisions. By using the identified priority focus areas and recommendations to guide project development, funding strategy, emergency preparedness, and long-term policy decisions, Wayne can reduce the likelihood that future flooding will isolate residents, damage critical infrastructure, disrupt essential services, or degrade the natural resources that are central to the community's character, health, and resilience.

1

Introduction

The Town of Wayne initiated this Flood Vulnerability Assessment to better understand how climate change may affect the community, with particular emphasis on inland flooding associated with extreme storm events, and aging or undersized stormwater infrastructure. The scope for this assessment also reflects the Town's interest in understanding how its two major dams, Wayne Village Dam and Lovejoy Pond Dam, influence local flood behavior and overall resilience. This project was funded through a Maine Community Resilience Partnership Community Action Grant awarded by the Governor's Office of Policy Innovation and the Future. The project is being completed by VHB, with support from Ecological Instincts, LLC, Town staff and volunteers, and local stakeholders.

The scope of this project includes a combination of data collection, stakeholder interviews, desktop analysis, field review, and a vulnerability assessment. As outlined in the project scope, the work includes confirming project goals with the Steering Committee; identifying relevant flood and climate hazards; compiling an inventory of town-owned critical assets; conducting targeted stakeholder engagement; and preparing a vulnerability assessment matrix that evaluates exposure, sensitivity and adaptive capacity resulting in a vulnerability score for each asset. The project also includes development of a prioritization framework and recommended next steps to help guide future resilience planning, capital improvements, and implementation efforts in Wayne.

Wayne's flood setting is central to both the community's identity and its vulnerability. The village center is located between Pocasset Lake and Androscoggin Lake, and many of the places that define Wayne's character, including the general store, post office, parks, docks, pedestrian bridge, and areas around the Wayne Village Dam are located within or adjacent to the FEMA-designated Special Flood Hazard Area. In North Wayne, the Lovejoy Pond Dam, a nearby public swimming area, and associated crossings serve both recreational and public safety functions, while additional ponds to the east including Dexter, Berry and Wilson Ponds contribute to Wayne's broader recreational landscape. Because transportation networks, electrical infrastructure, public facilities, and private development are closely tied to these lakes, ponds, streams, and impoundments, flood risk in Wayne is closely connected to the condition and performance of its water-related systems.

The project was conducted through an iterative process involving the Town's Steering Committee, which was formed with staff and volunteers specifically for this project, Select Board, Town staff, and a broader set of local and regional stakeholders. As outlined in the scope, this

engagement process includes confirming project goals, identifying data gaps, validating the critical asset inventory, and reviewing the vulnerability matrix and prioritization framework, along with targeted stakeholder interviews to capture local knowledge about flood history, asset performance, service delivery challenges, and community priorities. The technical work includes a desktop assessment, field review of dams, culverts, and road-stream crossings, and preparation of a vulnerability matrix that documents exposure, sensitivity, adaptive capacity and relative risk for each critical asset. Building on this analysis, the project identifies and prioritizes practical next steps to guide future resilience planning included in the Comprehensive Plan, capital improvements, and implementation efforts in Wayne.

Consistent with the scope of work, the purpose of this assessment is not only to identify Wayne's flood hazards and characterize where risk is greatest, but also to support practical, priority-driven adaptation strategies that protect public health and safety, maintain essential services and access, and strengthen long-term community resilience. The study is intended to align with and build on relevant state, regional, and local resilience, hazard mitigation, emergency management, watershed, and infrastructure planning efforts, including use of state and federal hazard datasets and review of plans such as the State of Maine Climate Action Plan, county hazard mitigation plans, such as the Kennebec County Hazard Mitigation Plan which Wayne was involved in supporting and other related local planning and regulatory documents further explained in the following chapters.

1.1 Study Area Context and Related Studies

This assessment builds on and complements several existing plans and studies that inform Wayne's approach to flood risk management and infrastructure planning. The foundational documents described below provided the primary basis for this review, which was further informed and supplemented by additional related reports referenced throughout this report.

Town of Wayne 2016 Comprehensive Plan[1]

Wayne's Comprehensive Plan was prepared as a revision to the Town's earlier 2001 plan and is intended to serve as a framework for identifying issues to be addressed, meeting state requirements for periodic plan updates, and maintaining eligibility for grants. The Plan was developed through a multi-year, locally driven process led by a Comprehensive Plan Committee appointed by the Select Board, with representation from the Planning Board, Board of Appeals, Conservation Commission, Selectboard, and at-large members, and informed by meetings with regional natural resource organizations, local service providers, school representatives, and the public. The Plan explains that Wayne is expected to experience relatively slow population and residential growth, and for that reason, places greater emphasis on protecting water quality, public health, and sound land use in existing developed and subdivided areas rather than accommodating major new growth. Its goals and strategies focus on maintaining public facilities and services, planning and financing capital improvements, upgrading Town roads and ditches, protecting wetlands and other sensitive resources, addressing erosion and stormwater runoff, strengthening shoreland and septic

1 Town of Wayne Selectboard and Comprehensive Planning Committee. 2016. *Comprehensive Plan for Wayne, Maine*. Wayne, ME: Town of Wayne. https://www.waynemaine.org/documents

management, supporting open space conservation, and improving implementation, monitoring, and enforcement of existing regulations.

These priorities are directly relevant to the Wayne Flood Vulnerability Assessment. The assessment's scope builds on the same core concerns reflected in the Comprehensive Plan, particularly the need to protect water quality, maintain roads and public facilities, strengthen emergency and community services, and guide investments in existing developed areas where infrastructure and environmental constraints are already closely intertwined. In that respect, the Vulnerability Assessment can be understood as a practical extension of the Comprehensive Plan. It translates the Plan's broader policy direction into a more focused evaluation of current and future flood risk and provides a stronger technical basis for capital planning, emergency preparedness, infrastructure investment, and long-term resilience actions in Wayne.

FEMA Kennebec County Flood Insurance Study[2]

The Wayne Vulnerability Assessment builds on the FEMA Kennebec County Flood Insurance Study (FIS), created based on data collected from flood events in 1973 and 1987 and analysis performed in October 1987/ April 2004 by using FEMA's mapped flood hazards as the regulatory and technical baseline for understanding flood exposure in Wayne, while extending that information into a more current, asset-focused, and action-oriented planning process. The FIS establishes the countywide framework for floodplain management under the National Flood Insurance Program and documents Wayne's flood mapping history, including the Town's initial identification of special flood hazard areas in 1974, Flood Hazard Boundary Map revision in 1976, and the effective Flood Insurance Rate Map date of April 3, 1989. It also provides the technical basis for Wayne's mapped flood hazards, including study shorelines for Androscoggin Lake, Berry Pond, Dexter Pond, Lovejoy Pond, Pocasset Lake, and Wilson Pond, as well as approximate-study areas such as Hales Brook and unnamed streams and ponding areas. For Wayne specifically, the FIS identifies 1-percent-annual-chance elevations of 285.8 feet NAVD for Androscoggin Lake, 288.6 feet NAVD for Pocasset Lake, 304.4 feet NAVD for Lovejoy Pond, 245.6 feet NAVD for Berry Pond, 245.3 feet NAVD for Dexter Pond, and 244.5 feet NAVD for Wilson Pond, and it notes that significant flooding in Wayne occurred in March 1936, December 1973, and April 1987. The study further explains that Wayne's flood behavior is shaped by heavy runoff, snowmelt, reverse flow in the Dead River, and backwater effects from the Androscoggin River into Androscoggin Lake, with the 1987 event producing flood elevations of about 288.5 feet NAVD on Pocasset Lake and 284.7 feet NAVD on Androscoggin Lake. However, our mapping for this assessment did not use the FEMA flood elevations reported to the nearest 0.1 foot. In recognizing the limitations of the older, lower-resolution terrain data and the margin of error associated with flood-frequency analyses, we intentionally rounded FEMA's lake flood elevations to the nearest whole foot and relied on LiDAR-derived 1-foot contour lines instead of the precise FIS values.

The Vulnerability Assessment complements this foundation by moving beyond regulatory mapping to evaluate how those flood conditions affect present-day roads, culverts, bridges, dams, public facilities, natural resources, and vulnerable populations in Wayne under both current and changing climate conditions.

2 Federal Emergency Management Agency, *Flood Insurance Study: Kennebec County, Maine (All Jurisdictions),* vol. 1 of 2, Flood Insurance Study No. 23011CV001A, effective June 16, 2011

Kennebec County Hazard Mitigation Plan (HMP)[3]

The Town of Wayne has been involved in hazard mitigation and climate resilience initiatives for many years in response to flooding and other natural hazard events that have periodically disrupted community functions. A central component of this effort is the Kennebec County Hazard Mitigation Plan (HMP), a multi-jurisdictional mitigation plan intended to encourage coordination among local, county, state, and federal agencies in hazard mitigation planning and implementation. The Town of Wayne first adopted the Kennebec County HMP in 2005 and has actively participated in each subsequent update. The HMP has been updated several times, most recently in 2021. As part of that update, the Kennebec County Emergency Management Agency Planning Team met with officials from the 29 participating municipalities to collect input on hazard identification, vulnerability and risk assessment, and mitigation goals and actions. This collaborative process helped ensure that local priorities were aligned with state and regional hazard mitigation planning guidance.

According to the Kennebec County Emergency Management Agency, in Wayne, seasonal spring flooding can occur when snowmelt and regional runoff raise water levels in the Androscoggin River system, periodically reversing flow in the Dead River and contributing to elevated water levels in Androscoggin Lake. These conditions can temporarily cut off access to vulnerable lake-adjacent areas. The HMP includes tables summarizing flood losses by municipality and by federal disaster declaration for the period 1987–2021; during that period, Wayne experienced approximately $155,986 in documented flood losses. Road washouts and damage from heavy precipitation events account for the majority of reported impacts. As a participating community in the National Flood Insurance Program (NFIP), Wayne enforces floodplain management regulations that limit new development in mapped flood hazard areas. The HMP also identifies several potential mitigation projects within Wayne, including projects on Upper Main Street, Hardscrabble Road, House Road, Dexter Pond Road, and the Tempy Bridge crossing.

These documents form a coordinated foundation for capital planning, regulatory updates, and emergency management. The findings of this assessment should be considered in future updates of the Town's Comprehensive Plan, the Kennebec County HMP, and Wayne's ongoing capital improvement programming.

3 Kennebec County Emergency Management Agency. 2021. *Kennebec County Hazard Mitigation Study*. Augusta, ME: Kennebec County Emergency Management Agency. https://www.chinamaine.org/images/PDFs/KCEMA_PLAN_FINAL_2021.pdf_FEMA_REVIEW.pdf

2

Planning Process

2.1 Approach and Methodology

The Flood Vulnerability Assessment was developed using a holistic, stepwise approach designed to understand how climate-driven flooding may affect the Town's people, infrastructure, natural systems, and community functions. Consistent with the project scope, the assessment focused on inland flooding associated with extreme storm events, while also considering related factors such as aging or undersized stormwater infrastructure, and the role of the Wayne Village and Lovejoy Pond Dams in influencing water levels. The approach combined desktop review of hazard, infrastructure, and planning data with stakeholder engagement, targeted field assessments, GIS-based mapping, and qualitative vulnerability and risk analysis to provide a planning-level understanding of where Wayne is most exposed and what actions may be most effective over time.

The assessment began with reviewing available baseline information to characterize existing and future-relevant flood hazards, compiling current flood and climate data, and developing an inventory of critical assets in Wayne. Hazard and asset data were then integrated into a GIS-based web application to support review by the Steering Committee, identify data gaps, validate mapped information, and confirm the final list of critical assets included in the assessment. In parallel, stakeholder interviews were used to incorporate local knowledge regarding flood history, asset conditions, service delivery challenges, vulnerable populations, and community priorities, ensuring that the analysis reflects Wayne's on-the-ground conditions as well as available datasets.

Using this foundation, the project team evaluated each identified critical asset through a vulnerability assessment framework based on exposure, sensitivity, and adaptive capacity, followed by a qualitative risk assessment incorporating both the relative likelihood of hazard occurrence and the severity of potential impacts. Exposure screening was informed by FEMA's approximate 100-year floodplain and other supporting hazard information developed through the desktop assessment, while field data collection helped refine understanding of dam features, road-stream crossings, culvert conditions, and other infrastructure characteristics relevant to local flooding.

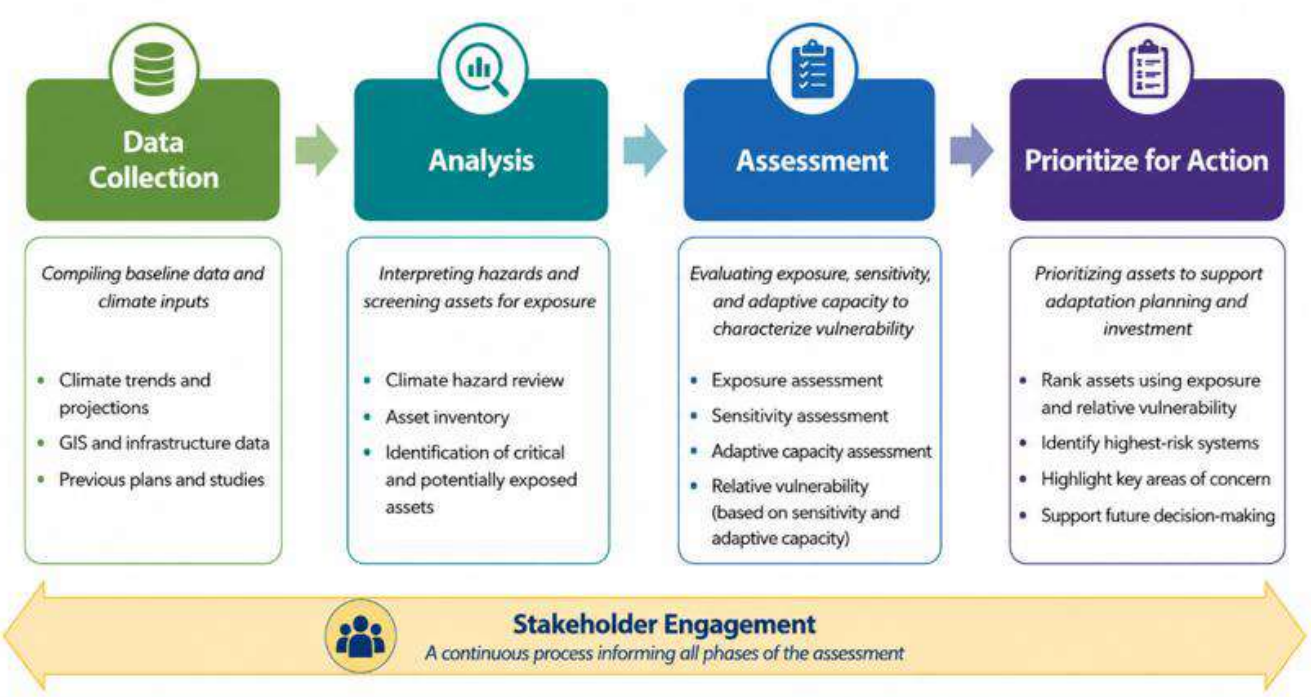
The results were compiled in a spreadsheet matrix documenting relative vulnerability and risk, together with high-level adaptation measures and a prioritization framework that considered

factors such as risk reduction potential, feasibility, cost-effectiveness, and alignment with community values and planning goals. Utilizing the previously mentioned data, planning-level recommendations were created to guide improvement of the resilience for Wayne's town-owned critical assets. The categories of recommendations are as follows:

- Priority Focus Areas
  - Near-Term Actions
  - Planning, Documentation, and Project Readiness
  - Operations and Maintenance
  - Emergency Preparedness and Access
- Capital and Infrastructure Improvements
- Community, Natural Resource, and Watershed-Scale Actions
- Implementation and Adaptation Over Time

Figure 1 summarizes the overall approach to the Town of Wayne's Climate Vulnerability Assessment.

Figure 1 Flood Vulnerability Assessment Approach



2.1.1 Stakeholder Engagement

Stakeholder engagement is a central component of the Wayne Vulnerability Assessment and is intended to ensure that the assessment reflects both technical analysis and local experience. As outlined in the scope of work, the process includes coordination with the Steering Committee from project initiation through review of draft findings, as well as targeted interviews with Town staff, committee members, service providers, partner organizations, and other individuals with knowledge of Wayne's assets, vulnerable populations, and flood-related challenges. This engagement was designed to help confirm project goals, identify relevant climate hazards, fill

data gaps, validate the critical asset inventory, and capture local knowledge about asset conditions, past flooding, service delivery constraints, and community priorities that may not be evident from mapped data alone.

The stakeholder process also directly informs the vulnerability assessment methodology and resulting recommendations. Information gathered through interviews and Steering Committee review is incorporated into the GIS-based asset inventory, the vulnerability matrix evaluating exposure, sensitivity, and adaptive capacity, and the prioritization of adaptation measures. In this way, stakeholder engagement helps ensure that the assessment is grounded in Wayne's existing conditions, reflects the needs of critical services and vulnerable populations, and supports the development of practical, locally relevant resilience strategies for implementation over time.

Stakeholder engagement for the Flood Vulnerability Assessment included an in-person meeting on February 26, 2026, with the Steering Committee and additional key stakeholders. Participants from the Steering Committee included Shannon McDonnell, staff member serving as Town Manager and Road Commissioner; Taylor Stevenson, volunteer with the Fire Department and Emergency Management; Paula Nersesian, volunteer serving as Vulnerability Assessment Project Manager and member of the Conservation Commission; Deb Emery, volunteer with the Aging at Home Committee; Chip Stephens, part-time staff member in Code Enforcement; and Eric Stinneford, Chair of the Ladd Recreation Center. Externally, the 30 Mile River Watershed Association was also interviewed as well as Lloyd Irland, Vice Chair of the Wayne Select Board, Select Board Rep of the Comprehensive Plan Committee, a member of the Conservation Commission and the Select Board Rep of the Dam Maintenance Committee. This engagement process helped inform the assessment by incorporating local knowledge of Wayne's critical assets, asset conditions, climate-related vulnerabilities, service delivery challenges, and community priorities. These insights supported identification and validation of critical assets and helped ensure that local perspectives were meaningfully reflected in the broader climate vulnerability assessment.

2.1.2 Baseline Data Collection

As a first step in developing this assessment, the project team researched, compiled, and reviewed available baseline data and mapping for the Town of Wayne and the surrounding region to establish a consistent understanding of flood hazards, critical assets, and vulnerable populations.

Key sources included FEMA Flood Insurance Rate Maps (FIRMs) and FEMA Kennebec County FIS, which provided the mapped 1-percent-annual-chance floodplain, base flood elevations, flood zone designations, and stillwater elevations for Wayne's major waterbodies, including Androscoggin Lake, Pocasset Lake, Lovejoy Pond, Berry Pond, Dexter Pond, and Wilson Pond. The FEMA flood data was used as the technical baseline for identifying where roads, culverts, bridges, dams, public facilities, and other assets may be exposed to flooding under existing conditions, and for informing the assumed 100-year floodplain used in the exposure and vulnerability analyses. It is critical to note that FEMA floodplain data used in this evaluation was not modeled using detailed methods and is only sufficient for planning purposes.

Geospatial datasets were collected from State of Maine GeoLibrary, including parcels, roadways, critical facilities, wetlands, riparian areas, and conservation lands, which were used to build the asset inventory, map asset locations, and evaluate the relationship between Wayne's built and natural systems and its flood features. Geospatial data for stream crossings (bridges and culverts)

were collected from MaineDOT and layers included in the Maine Stream Habitat Viewer, which includes data from state, federal, and non-profit organizations.

Additional information from MaineDOT, Maine Department of Environmental Protection (Maine DEP), National Oceanic and Atmospheric Administration (NOAA) and other state and federal sources were used to supplement the inventory with information on infrastructure condition, dam characteristics, water systems, hydrological data, and natural resources relevant to floodplains and community resilience. NOAA LiDAR data was used for topographic ground surface elevations.

Regional and local planning documents, including the Kennebec HMP and the 2016 Comprehensive Plan, were reviewed to provide context on known problem areas, existing vulnerabilities, previous studies, and community priorities, and to help ensure that this assessment aligns with the goals and ongoing planning and regulatory efforts in Wayne.

These baseline materials were then integrated into a GIS-based inventory and web application, reviewed with the Vulnerability Assessment Steering Committee to identify data gaps and validate critical assets, and used to support the subsequent evaluation of exposure, sensitivity, adaptive capacity, and prioritization of critical assets in Wayne.

2.1.3 Asset Inventory Development

The project team developed a geospatial inventory of Town-owned assets. Assets were initially identified and organized by general asset type, including roads, bridges, culverts, dams, public buildings, emergency centers, schools, recreational facilities, and key waterbodies.

The inventory was developed and refined using multiple information sources, including the Town's GIS data, the Kennebec County HMP, FEMA and NOAA resources and Maine DEP materials, input from Ecological Instincts, a subconsultant who performed field work collecting and verifying culvert locations and additional asset information in order to perform culvert sizing calculations and Town staff and stakeholders who identified which assets were most critical to be included.

Following initial compilation, the list of assets was reviewed and validated through input received from the Town of Wayne Steering Committee, Town staff, and emergency services personnel. Local knowledge was used to confirm asset locations, identify previously omitted assets, clarify functional roles, and distinguish assets with elevated importance to public safety, access, essential services, emergency response, or overall community function. Only assets identified as critical through this process were advanced for detailed flood exposure screening and vulnerability evaluation.

Asset categories shown in **Table 1** reflect the general classification framework used to organize inventoried assets; not all listed asset types are necessarily present within Wayne.

Table 1 Asset Categories

Asset Category	Asset Types1
Transportation	**Roads**, **bridges** and **overpasses**, rail lines and stations, public transit facilities, air transportation
Utilities	Water supply systems, wastewater treatment plants, **stormwater drainage systems**, distribution facilities, telecommunications infrastructure
Public Buildings	**Schools** and universities, libraries, **government offices**, **emergency services**, solid waste facilities
Critical Facilities	Disaster response warehouses
Environmental	**Wetlands**, **floodplains**, riparian buffers, **urban green spaces and parks**, publicly owned reservoirs and retention basins, public conservation lands
Social	**Public schools**, **community centers and recreation facilities**, public health infrastructure, social service offices, public transportation hubs, cultural institutions, public housing and affordable housing developments, historic properties or areas, **public cemeteries**

Notes:

1 Asset types shown in **bold** are Town-owned facilities located within Wayne. Not all listed asset types are present in Wayne.

2.1.4 Flood Exposure Screening Methods

Using the finalized asset inventory, the project team screened Town-owned critical assets for flood exposure by intersecting mapped asset locations with flood hazard layers representing the 1% annual exceedance probability (AEP) floodplain and higher planning-level flood conditions used for exposure screening. Using NOAA LiDAR data for topographic elevations, VHB performed geoprocessing to visualize flood elevations identified in FEMA's 2011 Kennebec County Flood Insurance Study (FIS). As noted above and described further in the FEMA FIS report, FEMA did not perform analysis using detailed methods to establish the floodplain elevations noted in the FIS report and used for this study. FEMA used documented elevations of historic floods of record from 1987 and 1936 to estimate flood elevations for major lakes and ponds. Therefore, these elevations should be used only for planning purposes, and detailed studies would be required to further refine floodplain elevations. FEMA's data identifies the 1% AEP floodplain (Zone AE) and associated flood zones and elevations where available. In approximate Zone A areas, FEMA maps identify Special Flood Hazard Areas but generally do not provide site-specific flood elevations, so those mapped boundaries were used as approximate planning areas rather than precise elevations.

The 1% AEP floodplain represents the baseline mapped flood condition used for regulatory and planning purposes. Where Base Flood Elevations (BFEs) are shown on FEMA mapping, they represent the elevation floodwaters are expected to reach during the 1% AEP flood. For this assessment, the project team did not apply a uniform higher-water increment in all locations. Instead, the team used planning-level higher flood conditions based on the best available mapping for each area, including FEMA flood data, LiDAR-derived elevation contours, and documented historical high-water conditions. Note these elevations are documented in FEMA FIS reports as precise to 1/10th of a foot, however, the methods used to calculate these elevations by FEMA do not support such a level of precision that would be accurate to use for this project. Therefore, elevations in this report are represented as a whole number.

All 1% annual chance flood elevations for Androscoggin Lake, Pocasset Lake, Berry, Dexter, Wilson and Lovejoy Pond were obtained from FEMA Flood Insurance Study (FIS) data and rounded to match the contour intervals used for planning. An additional "+1 foot" planning contour was mapped for Pocasset Lake, Berry, Dexter, Wilson and Lovejoy ponds, while Androscoggin Lake used a "+3 feet" planning contour to reflect its higher flood of record. These "planning level" flood elevations were not determined using detailed modeling methods but are estimates of potential flood elevations estimated from historic floods as documented by FEMA in the 2011 FIS report. **Table 2** summarizes the FEMA 1% AEP and planning-level flood elevations for each of the major waterbodies in Wayne.

Table 2 Approximate Flood Elevations for Study Waterbodies

Waterbody	FEMA 1% Annual Chance Flood Elevation (Feet NAVD 88)[4]	Planning-level Flood Elevation (Feet NAVD 88)
Androscoggin Lake	286	289
Pocasset Lake	289	290
Lovejoy Pond	304	305
Wilson Pond	245	246
Dexter Pond	245	246
Berry Pond	246	247

Using LiDAR-derived contours improved the spatial resolution of the screening analysis and supported a more refined evaluation of relationships among water levels, roads, buildings, dams, and shoreline features.

In FEMA-mapped Zone AE areas with established BFEs, the project team used FEMA floodplain boundaries and elevations together with LiDAR-derived elevation data, where available, to improve the planning-level representation of flood extents relative to local infrastructure and other assets. These areas were used to flag potential exposure for planning and comparative analysis only. In order to determine exact flood elevations, a more intensive flood and hydraulic study for each individual area would be required, which is outside the scope of this study.

The higher planning-level flood conditions used in this assessment served as a stress test to show how larger flood events and modest increases in water levels could expand inundation and increase the number of assets or asset segments intersecting mapped flood extents. These scenarios were intended to support comparative screening and prioritization and do not represent new regulatory flood elevations or modeled flood events with defined recurrence intervals.

Exposure Severity

This assessment characterized relative exposure severity qualitatively based on whether an asset intersected the mapped 1% annual chance floodplain, the higher planning-level flood condition, or both; the apparent extent of overlap at the planning level; and whether that overlap affected key functional portions of the asset, such as primary travel paths, crossings, access routes, or other components important to continued operation and service. Assets exposed under both scenarios, with more substantial overlap, and/or with flooding that affected critical functional areas generally received higher exposure severity ratings than assets with only limited overlap or exposure to a single scenario.

Tables 3 summarizes the principal evaluation drivers used to inform sensitivity scoring across asset types.

4 FEMA Flood Insurance Study. Kennebec County, Maine (All Jurisdictions), Volume 1 of 2. Flood Insurance Study Number 23011CV001A. June 16, 2011.

Table 3 Sensitivity Evaluation Drivers

Sensitivity Drivers
What fails first during flooding (which component is most vulnerable)?
Service impacts if the asset is impaired or offline
Key dependencies (power, access, staffing, vendors)
Consequences (safety, regulatory, financial)

Adaptive Capacity

This assessment also characterized the adaptive capacity of critical assets qualitatively by identifying the Town's ability to continue operating and recover when conditions change or disruptions occur. Adaptive capacity is driven by existing protections of the asset and depends on factors such as redundancies and workarounds, preparedness and response procedures, and the ability to quickly mobilize staff, equipment, contractors, and funding. Overall, adaptive capacity reflects how quickly and effectively a system can respond and return to normal given its available resources.

Tables 4 summarizes the principal evaluation drivers used to inform adaptive capacity scoring across asset types.

Table 4 Adaptive Capacity Evaluation Drivers

Adaptive Capacity Drivers
Current protections (e.g., drainage, pumps, barriers, elevation, sealing)
Redundancies/workarounds (backup equipment, alternate routes, alternate facilities)
Preparedness plans/SOPs and notification/response procedures
Ability to mobilize staff, equipment, contractors, and funding
Expected recovery time given access and available resources

Vulnerability Evaluation Framework

A facilitated Vulnerability Assessment Workshop was held on February 26, 2026, with Town committee members and staff informed asset sensitivity and adaptive capacity ratings. During the workshop, participants reviewed exposed Town-owned critical assets and collaboratively assigned qualitative ordinal sensitivity and adaptive capacity scores on a 0–4 scale, with 0 indicating lower sensitivity or adaptive capacity and 4 indicating higher sensitivity or adaptive capacity. Stakeholder feedback supported the scores, reflecting local knowledge, observed asset performance during past flood events, and operational considerations. Consideration of Social and Environmental Vulnerability

The planning process for this assessment considered environmental and social vulnerability as important community context for the asset-based flood analysis.

Social Vulnerability

While the primary focus of the assessment is on Town-owned and other critical assets, the project team also investigated locations and categories of vulnerable populations in Wayne. Social vulnerability was reviewed using the Maine Social Vulnerability Index (SVI) Dashboard together with Census-based indicators, stakeholder input, and local knowledge to identify

populations that may increase challenges during flood events, including older age, lower income, and limited transportation access. Specific statistics from the 2020 Census are described further under section 4.4 - Key Vulnerability Themes of this report.

Environmental Vulnerability

Environmental vulnerability was considered by reviewing how flooding may affect Wayne's lakes, ponds, wetlands, streams, riparian corridors, shoreline areas, septic systems, and other natural and water-resource features that influence both flood behavior and community resilience. These social and environmental considerations were not evaluated as separate stand-alone analyses; rather, they were used to inform stakeholder discussions, interpretation of asset vulnerability, prioritization of adaptation actions, and development of recommendations that better reflect Wayne's community needs, public health and safety concerns, and watershed context.

Culvert Sizing Analysis

A culvert screening and sizing analysis was also completed for this assessment for 11 high-priority culverts selected based on their proximity to mapped floodplains and known drainage concerns. Field visits were used to document existing conditions, followed by very high-level hydraulic modeling to evaluate whether each culvert is undersized, whether the roadway elevation is too low, or both. Based on these results, most culverts on major roadways (including Mt. Pisgah Road, Lord Road, Walton Road, Coolidge Road, North Wayne Road, Kents Hill Road, and Berry Road) were identified as undersized and/or located within critical floodplain areas, and were assigned high or medium priority for upsizing and/or roadway raising, while a smaller number of structures (e.g., Old Winthrop Road and Pond Road) were found to function adequately with no urgent action recommended. See Appendix F for a summary of assumptions and detailed data for each individual culverts assessed.

2.1.5 Prioritization Approach

Flood exposure and vulnerability were considered together to support comparative priority ratings and to inform adaptation actions. Assets with higher exposure severity, higher vulnerability ratings, or both, generally received higher priority for follow-up action.

Under this approach, prioritization reflects more than whether an asset intersects a flood hazard area. It also considers the consequences of disruption and the municipality's ability to respond, protect, and recover. As a result, an asset with limited mapped exposure may still rank as highly vulnerable if its sensitivity is high and its adaptive capacity is low. Conversely, an exposed asset may rank lower if consequences are limited or if strong adaptive capacity is already in place.

2.2 Study Limitations

The flood hazard extents used in this assessment rely on existing FEMA Flood Insurance Studies and historical flood events, supplemented with high-resolution LiDAR elevation data and available historical flood context. These mapped extents are intended for planning-level vulnerability screening and comparative analysis only and do not establish new flood frequencies, BFEs, or regulatory flood boundaries. They should not be used for site-specific design, permitting, or compliance decisions, which require detailed engineering and hydraulic

analyses consistent with FEMA, State Department of Environmental Protection, and State Dam Safety guidance.

This assessment focuses on municipally identified critical assets, meaning those with elevated importance for public safety, access, essential services, emergency response, or overall community function. Assets not identified as critical did not advance to a detailed vulnerability evaluation and may still be subject to flood impacts.

Vulnerability ratings are qualitative and comparative in nature. They are intended to support prioritization and decision-making rather than predict flood probabilities, damage estimates, or economic losses. The analysis does not include detailed hydraulic modeling, flood depth or velocity estimates, or structural capacity evaluations.

The plus 1-foot higher-water scenario is a planning-level screening tool and should not be interpreted as a modeled flood event with a defined recurrence interval. It is intended to test how modest increases in water levels may change the extent of mapped flood exposure across assets. Likewise, the relative exposure severity categories are meant for comparative prioritization only and do not substitute for site-specific flood, hydraulic, geotechnical, structural, or design analyses.

3

Impacts of Climate Change on Flooding

3.1 Impacts of Climate Change

Climate change is contributing to increased inland flooding risk in the State of Maine by altering the frequency and intensity of heavy precipitation events and the way water moves through local rivers, larger waterbodies, and stormwater systems. A warmer atmosphere can hold more moisture, increasing the likelihood of heavy downpours that may overwhelm natural and built drainage systems.[5] Riverine flooding and flooding of lakes and ponds in Wayne are often associated with these intense rainfall events, which can rapidly raise water levels in streams and tributaries draining to larger waterbodies within the Town. When tributary flows exceed channel or outlet capacity, water levels in receiving lakes and ponds can rise.

These same precipitation changes also heighten stormwater-related flooding. Aging, undersized, or misaligned drainage infrastructure in Wayne were often designed using historical rainfall assumptions and may not be adequate for current conditions or planning-level future increases in rainfall intensity. As a result, intense storms, with increased amounts of rainfall, can exceed the capacity of existing stormwater infrastructure, causing ponding on roads, backups into yards or basements, and washouts of roadways and driveways. Overall, climate change is amplifying both riverine and lake-related flooding and stormwater-related flooding in the State of Maine, with impacts on public safety, property, transportation networks, and the health of the Town's lake and pond systems.

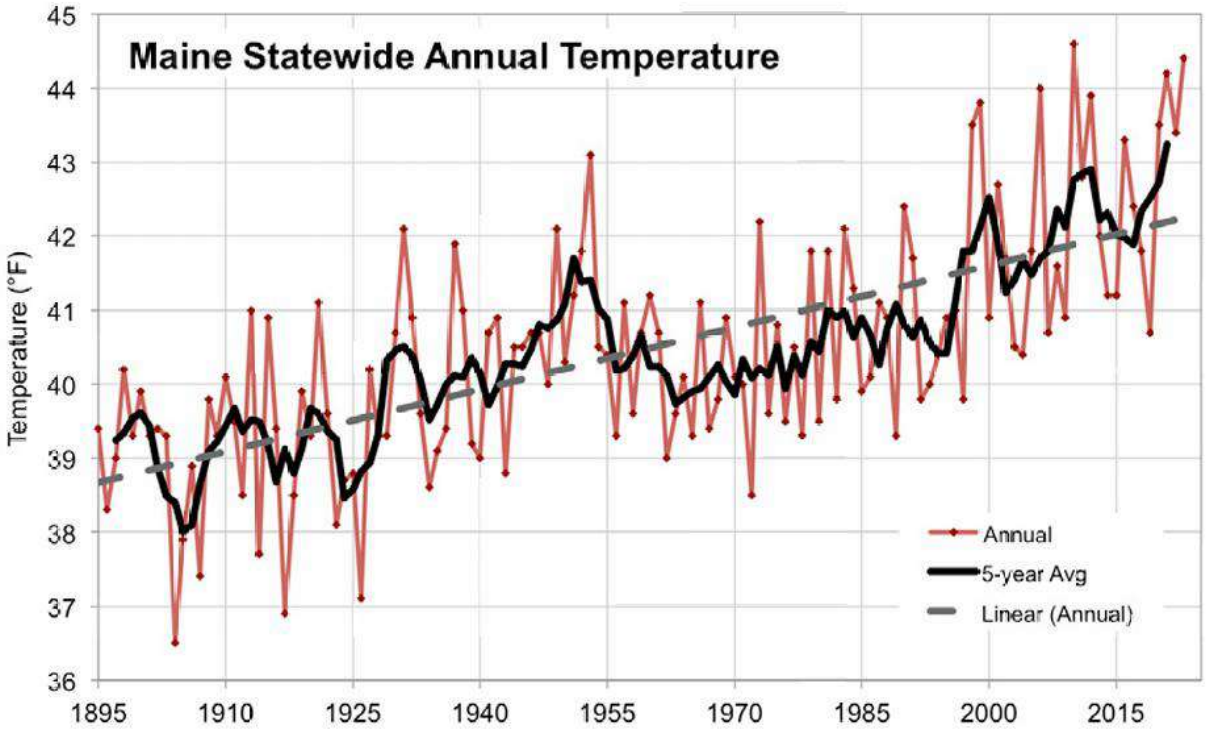
For purposes of this assessment, climate change considerations are based on observed trends and planning-level projections for increased extreme precipitation and related flood stressors, rather than on detailed modeling of future flood frequencies, depths, or probabilities.

5 National Oceanic and Atmospheric Administration. "Climate Change Impacts." Washington, DC: National Oceanic and Atmospheric Administration, 2023. https://www.noaa.gov/education/resource-collections/climate/climate-change-impacts

3.1.1 Observed Climate Trends in Maine

Overall, intense precipitation events are increasing, contributing to greater year-to-year variability between dry and wet conditions, as illustrated by the record dry 2020 growing season and the exceptionally wet summer of 2023. Winters are warming fastest (approximately 5°F warmer than a century ago), resulting in fewer freezing days, more winter rain events, and altered snowpack and snowmelt dynamics.[6] At the same time, the warm and growing seasons have each lengthened by roughly two weeks since the mid-20th century, with warmer conditions extending further into late summer and fall. Observed climate and precipitation projections, shown in **Figure 2** and **Figure 3** below, show continued warming and increasing precipitation intensity, with changes in storm frequency remaining more uncertain. These trends point to higher baseline temperatures, heavier rainfall events, and more pronounced extremes, with important implications for vulnerability and adaptation.[6]

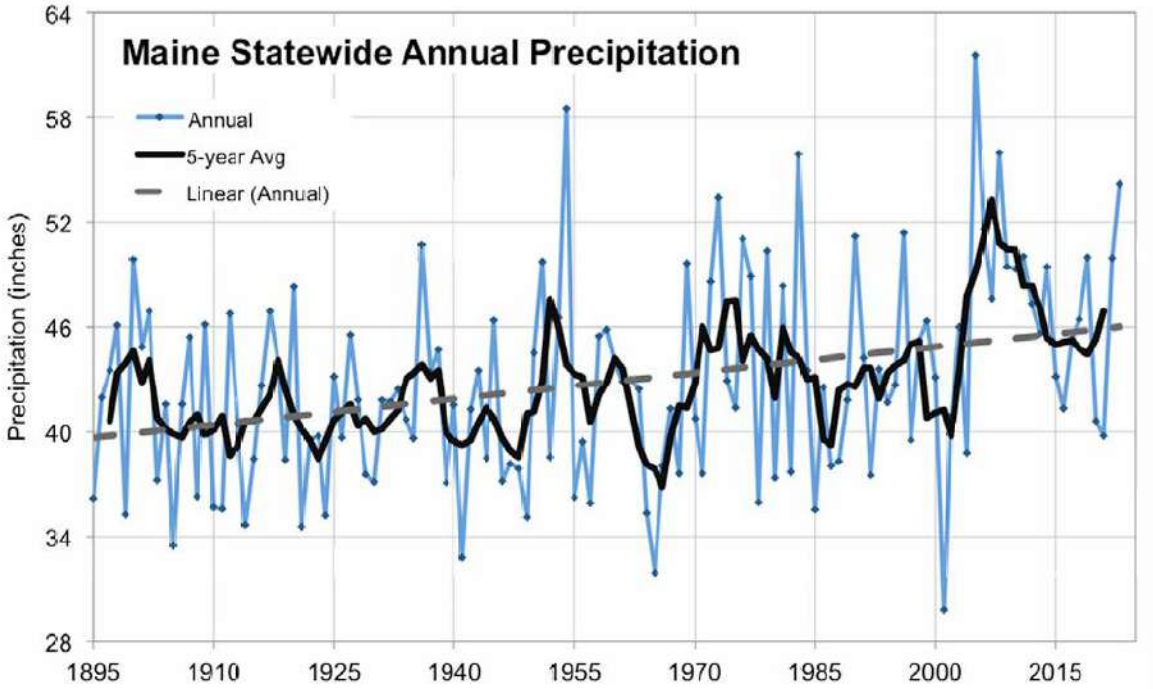
Figure 2 Maine Statewide Annual Temperature from 1895-2023



Maine's annual mean temperature from 1895–2023 based on data from the National Centers for Environmental Information (NCEI, 2024a). The dashed linear trendlines show temperature increases of 3.5°F (1.9°C), respectively, across the record period. Bold black lines represent five-year averages (Governor's Office of Policy Innovation and the Future 2024).

6 State of Maine, Governor's Office of Policy Innovation and the Future. *Maine Climate Council Scientific and Technical Subcommittee Report.* Augusta, ME: State of Maine, 2024.

Figure 3 Maine Statewide Annual Precipitation from 1895-2023



Maine's annual cumulative precipitation 1895–2023 based on data from the National Centers for Environmental Information (NCEI, 2024a). The dashed linear trendlines show precipitation increases of 6 inches (15 cm), respectively, across the record period. Bold black lines represent five-year averages.

The climate trends shown above underscore the importance of making the Town of Wayne more resilient to future high-water events. In Wayne, flooding is not just a temporary inconvenience; it has isolated residents, disrupted school, commuter, and emergency routes, damaged culverts, bridges, dams, and roads, impaired access to key facilities such as the Ladd Recreation Center, and increased erosion and water-quality impacts across the Town's lakes, ponds, streams, and wetlands. As heavier rainfall, changing runoff patterns, and higher water levels place greater stress on these systems, Wayne will need to move beyond reacting to individual storm damage and instead make sustained investments in resilience.

4

Vulnerability Findings

4.1 Overview

This section summarizes the results of the Flood Vulnerability Assessment for Town-owned assets in Wayne. Building on the exposure characterization described in Chapter 2 and the flood hazard characterization presented in Chapter 3, the findings reflect the combined effect of exposure severity, asset sensitivity, and adaptive capacity.

The purpose of this section is to identify the assets and systems most vulnerable to flooding in Wayne, explain the principal factors contributing to that vulnerability, rate Wayne's critical assets by priority, and highlight existing conditions that help reduce risk. Findings are based on GIS-based exposure screening, review of baseline data and historical information, field review of select culverts, and input provided by Town staff and stakeholders during the February 26, 2026, Vulnerability Assessment Workshop. Exposure severity and vulnerability ratings are comparative and planning-level in nature and are intended to support prioritization rather than predict flood probabilities, damage, design performance, or overall risk.

4.2 Flood Exposure Findings

As described in Chapter 2, exposure screening identified a concentrated set of Town-owned and critical community assets that intersect mapped flood hazard areas under the planning scenarios used in this assessment. These assets are primarily associated with low-lying road corridors, stream and pond crossings, village-area infrastructure, and shoreline areas affected by elevated lake and pond levels. Consistent with the methodology, exposure is characterized here based on whether assets intersect the mapped 1% annual chance flood, the higher planning-level flood condition, or both, together with the apparent extent of mapped overlap at the planning level. See Appendix C for a comprehensive inventory of asset locations.

Bridge Crossings

Several bridge crossings that support local circulation and emergency access intersect mapped flood hazard areas, including the Tempy Bridge crossing on Mount Pisgah Road, the North Wayne Bridge on Walton Road near the Lovejoy Pond outlet, and the Main Street bridge over Mill Stream. The Tempy Bridge has the highest rating of vulnerability and should be a priority in

implementing resiliency measures in the Town. Flooding at these locations could temporarily restrict travel, disrupt school and commuter routes, and reduce the reliability of emergency access.

Dams

The Wayne Village Dam and Lovejoy Pond Dam also occur within flood-influenced areas. While these structures can help manage water levels under some conditions, their exposure reinforces the importance of inspection, maintenance, and operational readiness during major storm events, consistent with the discussion under Roles of Dams in Town Resilience in Chapter 1.

Roadways

Several roadway segments that support daily circulation, school transportation, and emergency response intersect mapped flood hazard areas, including portions of Coolidge Road, Mount Pisgah Road, Old Winthrop Road, Walton Road, Main Street, and Pond Road. In some cases, exposed segments are relatively short; however, those segments may still warrant planning concern where flooding disrupts routes serving homes, camps, or community facilities. Exact locations of exposed road segments are found in the asset inventory in Appendix C.

Culverts

Culverts and local drainage infrastructure are also important exposure points. Several crossings, including culverts on Walton Road, Coolidge Road, Lord Road, and North Wayne Road, have documented or stakeholder-identified capacity concerns and may become overtopped, blocked, or structurally compromised during intense rainfall, high-water conditions, or debris and beaver blockage events.

Recreation Centers

The Ladd Recreation Center is exposed under planning-level higher-water conditions. Although the building itself may not be the first element affected, access, utilities, and supporting site infrastructure may be impaired by flooding.

Overall, exposure in Wayne is concentrated in a relatively small number of bridges, culverts, road segments, dams, and lake-influenced access areas. **Table 5** summarizes the planning-level exposure severity ratings used to support comparative interpretation across exposed assets, and **Table 6** summarizes the exposure findings for each asset type.

Table 5 Exposure Severity Categories

Exposure Severity Category[1]	General Description
Low	Asset intersects only the higher planning-level flood condition or shows minimal overlap with the mapped 1% annual chance floodplain, and the overlap does not clearly affect key portions of the asset or its access.
Moderate	Assets intersect the mapped 1% annual chance floodplain or shows more noticeable overlap under the higher planning-level flood condition, and the overlap may affect part of the asset or its access.
High	Assets intersect both the mapped 1% annual chance floodplain and the higher planning-level flood condition and/or shows substantial overlap affecting primary portions of the asset, such as main travel paths, crossings, or access routes.

Note:

1 Exposure severity categories are qualitative and planning-level in nature. They are intended to distinguish relative flood stress across assets and do not represent modeled flood depth, velocity, probability, expected damages, or engineering performance.

Table 6 Exposure Findings

Asset Type	Asset Name	Exposure	Exposure Severity
Bridge Overpass	Tempy Bridge (Mt. Pisgah Road Culvert)	Intersects 1% Flood Elevation	High
Bridge Overpass	North Wayne Bridge on Walton Road	Intersects 1% Flood Elevation	High
Bridge Overpass	Main Street (Route 133) over Mill Stream	Intersects 1% Flood Elevation	High
Community/ Rec Facilities	Ladd Recreation Center	Intersects 1% Flood Elevation	High
Dams	Wayne Village Dam	Intersects 1% Flood Elevation	Moderate
Dams	Lovejoy Pond Dam	Intersects 1% Flood Elevation	Moderate
Roads	Coolidge Road	Intersects 1% Flood Elevation	High
Roads	Gott Road	Intersects 1% Flood Elevation	Moderate
Roads	Mount Pisgah Road	Intersects 1% Flood Elevation	Moderate
Roads	North Wayne Road	Outside Planning-level Flood Elevations	Low
Roads	Old Winthrop Road	Intersects Planning-level Flood Elevations	Moderate
Roads	Walton Road	Intersects Planning-Level Flood Elevation	Moderate
Roads	Main Street (Route 133)	Intersects Planning-Level Flood Elevations	Moderate
Roads	Leadbetter Road	Outside Planning-level Flood Elevations	Low
Roads	Lovejoy Pond Road	Intersects Planning-Level Flood Elevation	Moderate
Roads	Pond Road	Intersects Planning-Level Flood Elevation	Moderate
Stormwater Drainage Infrastructure	Lord Road Culvert	Intersects 1% Flood Elevation	High
Stormwater Drainage Infrastructure	North Wayne Rd Culvert (near Cemetery)	Outside Planning-level Flood Elevations	Low
Stormwater Drainage Infrastructure	North Wayne Rd Culvert north of White Rd	Outside Planning-level Flood Elevations	Low
Stormwater Drainage Infrastructure	Walton Rd Culvert	Intersects 1% Flood Elevation	Moderate
Stormwater Drainage Infrastructure	Coolidge Rd Culvert	Intersects 1% Flood Elevation	High

Notes:

1 Lakes and ponds were considered in the Relative Vulnerability Ratings in Table 7 but were not included in exposure.

4.3 Vulnerability Evaluation Results

Building on the exposure findings above, vulnerability reflects the combined influence of sensitivity and adaptive capacity. In this assessment, sensitivity describes the degree to which flooding may affect an asset's function or service delivery, while adaptive capacity describes the Town's ability to prepare for, respond to, and recover from those impacts.

Sensitivity and adaptive capacity were evaluated qualitatively using the standardized 0–4 scoring framework described in Chapter 2 and applied in coordination with Town staff and stakeholders during the February 26, 2026, steering committee workshop. Higher sensitivity scores indicate greater functional consequences during flood events, while higher adaptive capacity scores indicate stronger preparedness, redundancy, protection, and recovery capability.

Comparative vulnerability ratings were then based on the interaction of these two factors. Assets with higher sensitivity and limited adaptive capacity were generally identified as having the highest relative vulnerability, while assets with lower sensitivity and stronger adaptive capacity were generally categorized as having moderate or lower relative vulnerability.

Table 7 summarizes the relative vulnerability rating categories used to interpret the interaction of sensitivity and adaptive capacity.

Table 7 Sensitivity and Adaptive Capacity Scoring Rubric (0-4)

Sensitivity **Higher Score = Greater Consequence**		**Adaptive Capacity** **Higher Score = More Capacity**	
0. Minimal impact	Remains functional; quick cleanup; negligible cost	0. Very low	No protection or backups; limited resources; very slow recovery
1. Minor disruption	Limited damage; short downtime; minor operational impacts	1. Low	Ad hoc measures; limited redundancy; inconsistent or slow recovery
2. Moderate disruption	Repairs needed; downtime measured in days; manageable safety controls	2. Moderate	Basic plans and some redundancy; recovery possible with effort or delay
3. Major impairment	Significant damage likely; downtime measured in weeks; notable safety or cost implications	3. Good	Established protection and preparedness; multiple resources; faster recovery
4. Severe consequences	Long outage; critical services compromised; major safety, health, or financial impacts	4. High	Strong redundancies and proven procedures; rapid restoration

Figure 4 below illustrates the comparative vulnerability categories associated with sensitivity and adaptive capacity scores for exposed assets.

Figure 4 Sensitivity by Adaptive Capacity and Relative Vulnerability Rating Matrix

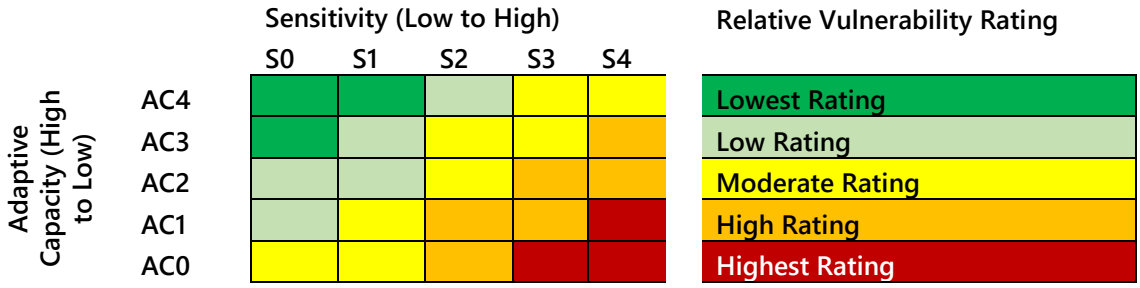


Table 8 below summarizes the relative vulnerability rating based on the sensitivity and adaptive capacity scores of each asset type.

Table 8 Relative Vulnerability Rating

Asset Type	Asset Name	Sensitivity Score	Adaptive Capacity Score	Relative Vulnerability Rating
Bridge Overpass	Tempy Bridge (Mt. Pisgah Road Culvert)	S3	AC0	Highest
Bridge Overpass	North Wayne Bridge on Walton Road	S3	AC2	High
Bridge Overpass	Main Street (Route 133) over Mill Stream	S4	AC3	High
Community/ Rec Facilities	Ladd Recreation Center	S4	AC2	High
Dams	Wayne Village Dam	S3	AC3	Moderate
Dams	Lovejoy Pond Dam	S3	AC2	High
Ponds & Lakes	Androscoggin Lake	S2	AC2	Moderate
Ponds & Lakes	Pocasset Lake	S1	AC3	Low
Ponds & Lakes	Dexter Pond	S1	AC3	Low
Ponds & Lakes	Berry Pond	S1	AC3	Low
Ponds & Lakes	Wilson Pond	S1	AC1	Moderate
Ponds & Lakes	Lovejoy Pond	S2	AC3	Moderate
Roads	Coolidge Road	S3	AC1	High
Roads	Gott Road	S3	AC1	High
Roads	Mount Pisgah Road	S3	AC2	High
Roads	North Wayne Road	S1	AC2	Low
Roads	Old Winthrop Road	S3	AC2	High
Roads	Walton Road	S1	AC2	Low
Roads	Main Street (Route 133)	S2	AC3	Moderate
Roads	Leadbetter Road	S1	AC1	Moderate
Roads	Lovejoy Pond Road	S2	AC2	Moderate
Roads	Pond Road	S3	AC2	High
Stormwater Drainage Infrastructure	Lord Road Culvert	S2	AC1	High
Stormwater Drainage Infrastructure	North Wayne Rd Culvert (near Cemetery)	S2	AC2	Moderate
Stormwater Drainage Infrastructure	North Wayne Rd Culvert north of White Rd	S2	AC2	Moderate
Stormwater Drainage Infrastructure	Walton Rd Culvert	S3	AC1	High
Stormwater Drainage Infrastructure	Coolidge Rd Culvert	S3	AC1	High

Priority Ratings by Asset

This plan assigns priority ratings to individual assets to clarify where the Town should focus its resources and attention first. Each road segment, culvert, public facility, or natural resource feature is evaluated based on its vulnerability to current and future hazards, its importance to community safety and daily functioning, and the feasibility of taking action. Taken together, the results show that higher-priority assets in the Town are not identified solely by whether they intersect a mapped floodplain. Rather, priority tends to be highest where exposure severity is greater, where vulnerability is elevated due to higher sensitivity and lower adaptive capacity, and where disruption would have significant consequences for emergency response, resident access, school transportation, or overall community function. By applying a consistent rating system across assets, the Town can compare needs, sequence investments over time, and ensure that the most consequential risks are addressed proactively, while continuing to monitor and maintain less vulnerable assets through baseline management.

Table 9 below describes the priority rating categories that were used to rate each critical asset.

Table 9 Priority Rating Categories

Relative Priority Ratings	General Description
Urgent Action Required	Conditions present a high or imminent risk to life, property, critical infrastructure, or essential services. Delaying action is likely to result in significant harm, legal non-compliance, or major cost escalation.
High Priority or Resilient Design	Issues pose substantial risk or are key opportunities to build long-term resilience. Action is not emergency level but is strategically important and should be integrated into near-term capital planning and design standards.
Medium Priority or Monitoring	Risks are moderate or uncertain, or existing conditions are acceptable but could worsen. Focus is on monitoring, planning, and incremental improvements so the town can respond quickly if conditions change.
Low Priority or Baseline Management	Issues are low risk, already adequately managed, or primarily involve maintaining current performance. Action consists of routine operations, maintenance, and small improvements as resources allow.

Figure 5 illustrates the comparative vulnerability categories associated with exposure severity scores for priority assets.

Figure 5 Relative Priority Rating Matrix

		Exposure		
		Low Exposure	**Moderate Exposure**	**High Exposure**
Vulnerability	**Lowest**	Baseline Management	Baseline Management	Baseline Management
	Low	Baseline Management	Baseline Management	Monitoring
	Moderate	Baseline Management	Monitoring	Resilient Design
	High	Monitoring	Resilient Design	Urgent Action Required
	Highest	Resilient Design	Urgent Action Required	Urgent Action Required

Table 10 summarizes the results for each exposed critical asset by combining its planning-level exposure severity rating with its relative vulnerability rating to support overall priority rating.

Table 10 Relative Priority Ratings

Asset Type	Asset Name	Exposure Severity Rating	Relative Vulnerability Rating	Relative Priority Ratings
Bridge Overpass	Tempy Bridge (Mt. Pisgah Road Culvert)	High	Highest	Urgent Action Required
Bridge Overpass	North Wayne Bridge on Walton Road	High	High	Urgent Action Required
Bridge Overpass	Main Street (Route 133) over Mill Stream	High	High	Urgent Action Required
Community/ Rec Facilities	Ladd Recreation Center	High	High	Urgent Action Required
Dams	Wayne Village Dam	Moderate	Moderate	Monitoring
Dams	Lovejoy Pond Dam	Moderate	High	Resilient Design
Roads	Coolidge Road	High	High	Urgent Action Required
Roads	Gott Road	Moderate	High	Resilient Design
Roads	Mount Pisgah Road	Moderate	High	Resilient Design
Roads	North Wayne Road	Low	Low	Baseline Management
Roads	Old Winthrop Road	Moderate	High	Resilient Design
Roads	Walton Road	Moderate	Low	Baseline Management
Roads	Main Street (Route 133)	Moderate	Moderate	Monitoring
Roads	Leadbetter Road	Low	Moderate	Baseline Management
Roads	Lovejoy Pond Road	Moderate	Moderate	Monitoring
Roads	Pond Road	Moderate	High	Resilient Design
Stormwater Drainage Infrastructure	Lord Road Culvert	High	High	Urgent Action Required
Stormwater Drainage Infrastructure	North Wayne Rd Culvert (near Cemetery)	Low	Moderate	Baseline Management
Stormwater Drainage Infrastructure	North Wayne Rd Culvert north of White Rd	Low	Moderate	Baseline Management
Stormwater Drainage Infrastructure	Walton Rd Culvert	Moderate	High	Resilient Design
Stormwater Drainage Infrastructure	Coolidge Rd Culvert	High	High	Urgent Action Required

4.4 Key Vulnerability Themes

The following themes synthesize common patterns observed across exposed assets and help explain why certain locations emerge as high priorities in the vulnerability Ratings.

4.4.1 Limited-Access Roads and Crossings Create High-Consequence Flood Risk

A defining vulnerability pattern in Wayne is the presence of roads and crossings that function as single-access or near-single-access routes, where even relatively localized flood exposure can produce disproportionately high consequences.

Coolidge Road

Coolidge Road exemplifies this condition. It is a dead-end road serving more than 40 private properties and providing the only access to Leadbetter Road, West Acres Road, Wood Road, and Camp Androscoggin. Portions of the road lie within the mapped 1% annual chance flood area, and larger events may overtop the roadway. With no practical alternate routes, flooding could isolate residents and interrupt access to critical destinations. Its Rating reflects the combination of mapped flood exposure, the access dependence of multiple downstream roads and properties, and limited route redundancy.

Gott Road

Gott Road presents a similar, though more localized, vulnerability. The road serves more than 20 private properties and includes a low-lying segment near the Ladd Recreation Center.

Leadbetter Road

Leadbetter Road, while less extensively mapped within the floodplain, remains vulnerable because it is the sole route to several private roads and Camp Androscoggin. In these cases, relative vulnerability is driven as much by access dependence and consequence of disruption as by mapped flood extent alone.

Lord Road

Lord Road also represents a high-consequence crossing because inundation or blockage at the culvert could temporarily strand several dozen residents.

Tempy Bridge - Mount Pisgah Road Culvert

At Tempy Bridge on Mount Pisgah Road, overtopping, debris accumulation, and scour potential create significant sensitivity, affecting emergency access and access to nearby recreational destinations.

4.4.2 Culvert and Drainage Constraints May Contribute to Localized Flooding

Undersized, aging, or obstruction-prone culverts represent another major vulnerability theme. In Wayne, these features often represent the first point of failure during intense rainfall events,

meaning that even modest increases in water level or debris loading can translate into disproportionately high functional consequences.

A documented washout at a culvert along North Wayne Road in December 2023 illustrates how overtopping and embankment failure can occur even where roadway surfaces are not extensively mapped within floodplains. An additional vulnerability is present at a second North Wayne Road culvert north of White Road, where limited freeboard may reduce resilience during larger runoff events.

The Walton Road and Coolidge Road culverts have documented histories of debris accumulation and overtopping and serve heavily traveled routes. The Lord Road culvert, combining no detour availability with beaver activity and limited capacity, presents compounded risk.

4.4.3 Lake, Pond, and Backwater Flooding Create Compound Shoreline and Access Impact

Flooding around Wayne's major lakes and ponds involves compound processes influenced by runoff, outlet constraints, and backwater effects. Androscoggin Lake, because of its connection to the Dead River outlet system, is particularly susceptible to backwater influence during high regional flows, affecting shoreline areas, access roads, septic systems, and public access points. Similar compound processes are described in the draft's hazard characterization and historical flood discussion.

Similar vulnerabilities exist around Pocasset Lake and Lovejoy Pond, where elevated water levels may affect adjacent roads, culverts, shorefront development, and water-management infrastructure. These impacts extend beyond inundation alone, contributing to shoreline erosion, access disruption, septic-system stress, and water-quality degradation.

4.4.4 Community Facilities Can Be Functionally Vulnerable Even When Structural Flooding Is Limited

The Ladd Recreation Center illustrates how community facilities can be vulnerable because flooding may impair access, utilities, and site operations even where direct building inundation is limited. Flooding of the access road could limit use of the facility during emergencies, even if the structure is less affected. The location of the well and proximity of the generator to flood-prone areas further support consideration of targeted resilience measures. Because the facility also serves important community and emergency functions, even limited access disruption at this site may have broader consequences than the extent of direct building exposure would suggest.

4.5 Existing Conditions That Reduce Vulnerability

Despite several notable vulnerabilities, existing practices and protections reduce vulnerability for some assets.

- MaineDOT ownership and maintenance of key bridges improve adaptive capacity through regular inspection and response capability. The Main Street bridge over Mill Stream, rebuilt and raised, benefits from modern design and formal management procedures.
- The Wayne Village Dam benefits from an Operations and Maintenance Plan and defined management roles, while Lovejoy Pond Dam has relatively simple hydraulic characteristics

that reduce some operational risks. Targeted measures, such as beaver exclusion fencing at the Lord Road culvert, directly address recurring causes of blockage.

- Regulatory measures and watershed efforts, including shoreland zoning and septic inspection requirements, further help reduce secondary impacts associated with flooding and prolonged high-water conditions.

4.6 Social and Environmental Vulnerabilities

To supplement the flood vulnerability assessment of Town-owned and critical infrastructure assets, this assessment also considers social and natural resource vulnerabilities. While the primary focus is on municipal assets and operations, these broader dimensions provide essential community context and help inform prioritization of adaptation actions, emergency response planning, and equitable resilience investments.

4.6.1 Social Vulnerability

Social vulnerability refers to the extent to which certain populations may be disproportionately affected by hazard events due to social, economic, demographic, or health-related factors that influence their ability to prepare for, respond to, and recover from flooding. This assessment included reviewing the Maine Social Vulnerability Index (SVI) Dashboard, a statewide, GIS-based screening tool that incorporates 2020 U.S. Census data across four principal themes: socioeconomic status, household characteristics, racial and ethnic minority status, and housing type and transportation. These indicators provide a planning-level understanding of where residents may face increased challenges related to evacuation, emergency communication, access to resources, and post-disaster recovery.

At the townwide scale, Wayne is classified as having relatively low overall social vulnerability compared to many other Maine communities, with an overall SVI percentile of approximately 0.08. However, town-level averages do not fully capture local conditions that may increase vulnerability for specific households or neighborhoods. In particular, approximately 31 percent of Wayne residents are age 65 or older, approximately 17 percent of residents live below 150 percent of the federal poverty level, and a small but meaningful number of households lack access to a personal vehicle.[7] These characteristics may increase challenges during flood events, especially where evacuation, access to services, or recovery depends on mobility, physical ability, fixed income, or social support networks. Although Wayne does not exhibit high overall social vulnerability, these factors remain important considerations in emergency planning and resilience decision-making. Flood-prone and limited-access road corridors, disruptions to essential services, and isolation during events may have disproportionate consequences for older adults, lower-income households, and residents with limited transportation options.

4.6.2 Environmental Vulnerability

Wayne's natural and water resources are closely interconnected with flood vulnerability, and flooding can affect ecological systems through higher water levels, more intense runoff, erosion, sediment transport, and water-quality degradation. The Town's lakes and ponds, wetlands,

6 Maine Social Vulnerability Index Dashboard. https://www.arcgis.com/apps/dashboards/7f91e2c287294b35acdeebbd4da9046d#

streams, and riparian corridors are exposed to flood stressors that may become more pronounced under changing climate conditions.

Septic systems in flood-prone areas are a particular concern, as elevated lake levels, groundwater rise, and saturated soils can reduce treatment effectiveness or cause system failure, increasing the risk of nutrient and pathogen release to surface waters. These impacts raise public health concerns in waterbodies used extensively for recreation and may contribute to nuisance algal blooms and longer-term water-quality degradation.

Flooding also mobilizes sediment, nutrients, and other pollutants from upland areas, shoreland development, eroding banks, and disturbed soils into wetlands, streams, lakes, and ponds. In addition to degrading water quality, these processes can stress aquatic habitat and impair natural system functions, including flood storage, filtration, shoreline stabilization, and habitat connectivity.

Wayne's larger waterbodies, including Androscoggin Lake, Pocasset Lake, and Lovejoy Pond, experience a combination of shoreline and water-quality vulnerabilities. Elevated water levels, wave action, and ice can accelerate shoreline erosion, destabilize banks, and increase sediment inputs to surface waters. In some areas, high water may also inundate older shoreline septic systems, further increasing nutrient and bacterial loading.

Beyond the shoreline, streams, wetlands, and riparian areas are vulnerable to erosion and instability during higher-flow events. Increased flow velocities and fluctuating water levels can contribute to bank erosion, channel adjustment, sediment deposition, and habitat disturbance, with downstream implications for water quality and aquatic ecosystem health. These processes reinforce the close linkage between flood resilience, watershed condition, and lake and stream health.

Because these vulnerabilities often extend beyond individual sites and cross municipal and watershed boundaries, improving resilience will require coordination at the watershed scale. Aligning local resilience efforts with lake protection initiatives, watershed management efforts, and state water-quality objectives may help Wayne strengthen partnerships, support more strategic resource management, and improve long-term environmental outcomes.

4.7 Priority Focus Areas

Building on the vulnerability themes described above, the comparative Ratings and stakeholder discussions identify a focused set of corridors and locations that should anchor Wayne's near- and mid-term adaptation planning. These focus areas reflect locations where relative exposure severity, consequence of disruption, and limited adaptive capacity intersect most clearly.

These include:

- Single-access or near-single-access corridors such as Coolidge Road, Gott Road, Leadbetter Road, and portions of North Wayne Road;
- Key school, commuter, and emergency routes including Mount Pisgah Road, Walton Road, Main Street, and Leeds Road/Route 219;
- Priority culvert crossings such as Lord Road, North Wayne Road, Walton Road, and Coolidge Road;
- Bridge and dam assets with high community consequences, including Tempy Bridge, North Wayne Bridge, Main Street Bridge, and the Wayne Village and Lovejoy Pond Dams;

- Lake-influenced areas around Androscoggin Lake, Pocasset Lake, Lovejoy Pond, Wilson Pond, Dexter Pond, and Berry Pond; and
- The Ladd Recreation Center, due to its access constraints and emergency function.

These focus areas, therefore, serve as the practical expression of the prioritization framework. Some rank highly because they are exposed under both mapped and higher planning-level flood conditions, while others rise to the top because even limited mapped exposure affects a controlling crossing, access bottleneck, or critical facility with few practical workarounds. Together, they provide a clear basis for targeting more detailed analysis, capital investment, maintenance planning, emergency preparedness measures, and coordinated watershed-scale resilience actions, and they form the basis for the targeted adaptation recommendations and investment priorities presented in the following section.

5

Recommendations for Improved Resilience

The recommendations below translate the findings of this Flood Vulnerability Assessment into a practical set of actions the Town of Wayne can implement over time to reduce flood vulnerability and strengthen community resilience. They are informed by the asset inventory, exposure characterization, comparative vulnerability Ratings, stakeholder input, and the social and natural resource considerations described in earlier chapters.

The recommendations focus on locations and asset types where relative exposure severity, high functional consequence, and limited adaptive capacity intersect most clearly. In particular, priority is given to assets that are affected under mapped and higher planning-level flood conditions, assets where flooding influences a critical crossing or access bottleneck, and assets for which disruption would have disproportionate consequences for public safety, emergency response, access, or community function. The recommendations are designed to help the Town prioritize actions, phase near- and long-term measures, and align resilience efforts with available resources and planning processes. The Town of Wayne is currently updating its Comprehensive Plan to better reflect current conditions and future needs. As part of this process, the recommendations from this assessment should be integrated directly into the revised plan's policies and implementation strategies.

5.1 Priority Focus Areas

Building on the results of Table 8, Wayne's recommendations focus directly on the Relative Priority Ratings assigned to specific assets, using four main management tracks: Urgent Action Required, Resilient Design, Monitoring, and Baseline Management. See Appendix B for maps displaying locations of the following priority focus areas:

‘Urgent Action Required’ Relative Priority Rating

Assets with a Relative Priority Rating of Urgent Action Required represent the highest near-term priorities.

These include:

- Tempy Bridge (Mt. Pisgah Road Culvert)
- North Wayne Bridge on Walton Road
- Main Street (Route 133) over Mill Stream
- Ladd Recreation Center
- Segments of Coolidge Road
- Lord Road Culvert
- Coolidge Road Culvert

Each of these combines high exposure severity with high or highest vulnerability, meaning that failure or loss of function would significantly disrupt access, drainage, or community services. They warrant detailed engineering assessment, interim risk-reduction measures, and early placement in the town’s capital and grant-seeking efforts.

‘Resilient Design’ Relative Priority Rating

Assets with a Relative Priority Rating of Resilient Design, where exposure is moderate, but vulnerability is high, are next-tier priorities that should be brought up to climate-ready standards when capital work occurs.

These include:

- Lovejoy Pond Dam
- Gott Road
- Mount Pisgah Road
- Old Winthrop Road
- Pond Road
- Walton Road Culvert

For these assets, upcoming projects should incorporate larger or more robust crossings, improved drainage capacity, and design elevations that reflect projected future flood conditions, even if immediate emergency action is not required.

‘Monitoring’ Relative Priority Rating

Several assets are assigned a Relative Priority Rating of Monitoring.

These include:

- Wayne Village Dam
- Lovejoy Pond Road
- Main Street (Route 133) roadway segment

For these locations, current exposure and vulnerability do not yet justify major capital intervention, but they merit targeted inspections, performance tracking during storm events, and

integration into emergency access and detour planning so that emerging issues can be identified early.

'Baseline Management' Relative Priority Rating

Finally, several assets are assigned a Relative Priority Rating of Baseline Management.

Including:

- North Wayne Road
- Walton Road
- Leadbetter Road
- North Wayne Road culvert (near the cemetery)
- North Wayne Road culvert (north of White Road)

These locations can generally be managed through routine maintenance, vegetation and ditch management, culvert cleaning, and standard road program investments. These locations still play important roles in the network, but Table 8 indicates that their current combination of exposure and vulnerability allows them to be addressed within regular maintenance and longer-term capital improvement cycles rather than as immediate adaptation priorities.

5.1.1 Near-Term Actions

Near-term actions represent lower-cost, higher-readiness steps that can begin improving resilience while more complex capital projects are being evaluated, designed, and funded. Many of these actions apply across multiple priority focus areas.

Planning, Documentation, and Project Readiness

- Use the vulnerability findings to establish and maintain a formal list of priority assets for phased action within the Town's capital improvement planning and road management processes.
- Maintain and periodically update the Town's GIS-based asset inventory to reflect asset location, ownership, condition, criticality, and observed flood performance.
- Establish standard procedures for documenting flood events, including overtopping locations, road closures, erosion, culvert blockages, damages, and approximate flood depths or durations where known.
- Develop concept-level project scopes and preliminary cost estimates for a short list of top-tier projects to improve readiness for grant and funding opportunities.

Operations and Maintenance

- Implement routine inspection and maintenance protocols for flood-prone culverts, such as Lord Road, North Wayne Road (near cemetery), North Wayne Road north of White Road, Walton Road and Coolidge Road culverts, roadside ditches, bridge approaches, and lake-adjacent access areas, with defined triggers for pre-storm and post-storm inspections.
- Prioritize debris, sediment, ice, and beaver-related maintenance at known choke points, particularly where crossings serve single-access or near-single-access neighborhoods.

- Increase post-storm inspection and condition documentation for priority roads, culverts, bridges, and dam-related structures to inform maintenance decisions and support future capital planning.

Emergency Preparedness, Access, and Communication

- Identify and document alternative access routes and emergency response contingencies for neighborhoods served by single-access or near-single-access corridors such as Coolidge Road, Gott Road, and Leadbetter Road.
- Integrate identified flood-prone corridors and crossings into emergency operations planning, including road closure protocols, public notification procedures, and coordination with emergency services.
- Review and update flood-related response procedures for key facilities, including the Ladd Recreation Center, to support continuity of emergency and community services during flood events.
- Determine alternative forms of communication for residents in neighborhoods served by single-access or near-single-access corridors, such as Coolidge Road, Gott Road, and Leadbetter Road, and residents who are older and lacking proper transportation.
- Plan and create public events and materials to educate the public regarding preventative actions residents in exposed and vulnerable areas can take to prepare for emergency situations before they occur, such as storm preparedness expos, distributing flyers and brochures door-to-door or through local organizations / public libraries.

5.1.2 Capital and Infrastructure Improvements

Longer-term capital actions will be necessary to address highly vulnerable assets. These actions will require detailed assessment, engineering, permitting, and coordination with external agencies and partners.

- The first set of capital priorities should focus on undersized or failure-prone culvert crossings at locations such as **Lord Road, North Wayne Road, Walton Road, Mount Pisgah Road, and Coolidge Road culverts**. Consistent with the draft recommendations, the Town should evaluate replacement or retrofit options that improve hydraulic capacity and incorporate debris passage, scour protection, and climate-adjusted design criteria; where feasible, these projects should also support aquatic connectivity. At these access-constrained locations, more resilient culvert designs would help shorten closures, reduce washout risk, improve emergency response reliability, restore flood continuity, reduce erosion and sediment transport, and lower lifecycle operations and maintenance costs associated with repeated repairs and detours. For undersized or failure-prone culvert crossings, future retrofit or replacement projects in Wayne should be advanced in a manner consistent with applicable MaineDOT culvert and drainage design standards and practices, particularly for crossings where overtopping, debris blockage, scour, or embankment washout have already been documented or where closure would create significant access consequences.
- Assess options for roadway elevation, drainage improvements, or realignment along priority road segments, including **Coolidge Road, Mount Pisgah Road, North Wayne Road, Old Winthrop Road, Walton Road, and Pond Road**, where recurring flooding or overtopping affects access, public safety, or emergency response.

- Coordinate with MaineDOT on state-owned bridges and roadways so that Town-identified vulnerabilities are considered in maintenance, upgrade, and capital investment decisions.
- When undertaking culvert retrofits, stream crossing restorations, and other infrastructure improvements, the Town of Wayne should consider using Stream Smart crossing principles to size and design crossings that better accommodate high flows while maintaining more natural stream function. This approach can help improve long-term infrastructure resilience and reduce the likelihood of flood-related damage.
- Continue proactive inspection, maintenance, and long-term planning for the **Wayne Village Dam and Lovejoy Pond Dam**, including periodic review of Operations and Maintenance Plans and Emergency Action Plans. Further modeling of dam breach scenarios may be warranted to inform potential downstream inundation if dams were to fail.
- Assess the option of implementing a stormwater utility fee for properties with impervious area that contribute to stormwater runoff. This could fund the Town's stormwater management and pollution reduction efforts, including capital improvement projects.

5.1.3 Community, Natural Resource, and Watershed-Scale Actions

Flood resilience in Wayne is closely linked to the condition of its lakes, ponds, streams, wetlands, and surrounding watersheds. In parallel with infrastructure investments, the Town should pursue actions that reduce erosion, protect water quality, and improve natural flood attenuation functions using a more nature-based approach.

- Coordinate road, culvert, and drainage improvements with lake protection initiatives, watershed management efforts, and state water quality objectives to maximize co-benefits. Where feasible, projects should incorporate nature-based and low-impact practices, such as vegetated swales, infiltration areas, and buffer restoration, to slow runoff, reduce erosion, improve pollutant removal, and complement conventional drainage upgrades
- Support shoreline stabilization, erosion control, and septic system upgrades or monitoring in flood-prone lake and pond areas, in coordination with property owners and watershed organizations. In addition to conventional stabilization where needed, Wayne should encourage nature-based shoreline approaches, such as native plantings, coir logs, live staking, vegetated toe protection, and other bioengineering techniques, where site conditions allow, particularly around Androscoggin Lake, Pocasset Lake, and Lovejoy Pond, where elevated water levels, wave action, and ice contribute to erosion and water-quality impacts
- Incorporate flood resilience considerations into conservation planning for wetlands, riparian buffers, and undeveloped floodplains that provide natural storage and attenuation.
- Track how infrastructure upgrades affect sediment transport, erosion, aquatic habitat, and water quality over time to inform adaptive management.
- A town septic system update incentive program could provide financial and technical support to homeowners to repair, upgrade, or replace aging or failing systems before they cause problems. The town could offer partial grants, low-interest loans, or tax credits for work such as replacing failing leach fields, adding advanced treatment units, or doing documented maintenance. Participation could be tied to regular inspections, proof of maintenance, and the use of licensed installers to ensure high-quality work. The program would reduce groundwater contamination, protect public health, and lower long-term infrastructure and cleanup costs for the town in the event of septic system failure due to flooding.

5.1.4 Implementation and Adaptation Over Time

Flood risk in Wayne will continue to change as infrastructure ages, land use evolves, and climate conditions shift. Effective implementation of these recommendations will require periodic reassessment and adjustment.

- Revisit vulnerability Ratings and priority focus areas following major flood events or as new data becomes available.
- Integrate resilience goals into routine planning updates, including the Comprehensive Plan, regional HMP updates, and capital improvement programming.
- Pursue external funding opportunities proactively by maintaining project readiness and aligning Town priorities with state and federal resilience initiatives.
- Treat resilience planning as an ongoing process that balances near-term action with long-term investment and learning.

5.1.5 Implementation of Next Steps and Funding Opportunities

With the vulnerability assessment complete, the next step for Wayne is to move from analysis to implementation by organizing, developing, and funding priority adaptation projects. In the near term, the Town should use the comparative vulnerability Ratings and asset focus areas identified in this assessment to prepare a preliminary capital and implementation plan for the next 5–10 years. This plan should sequence high-priority road, culvert, bridge, dam, lakefront, and community facility projects and pair them with appropriate adaptation strategies, likely partners, and potential funding sources.

As part of this transition, the Town should:

- Refine cost and feasibility estimates for a short list of top-tier projects through targeted field visits and concept-level engineering;
- Integrate priority projects into the municipal capital improvement program, road management planning, and future updates of local and regional hazard mitigation plans;
- Identify near-term grant and partnership opportunities aligned with the recommended actions; and
- Continue to update the Town's web-based GIS and document future flood events, asset performance, and citizen-reported problem areas to support adaptive management over time.

Ongoing engagement with Town boards and committees, emergency services, lake and watershed organizations, and affected neighborhoods, particularly those with higher social vulnerability, will be important to confirm priorities, coordinate implementation, and ensure that adaptation investments remain technically sound and responsive to community needs.

Wayne may be able to pursue a mix of state, federal, and partner-supported funding sources to advance priority resilience projects. Potentially relevant funding sources include state infrastructure adaptation programs, aquatic resource and watershed restoration grants, and federal hazard mitigation programs. Because funding criteria, schedules, eligibility requirements, and application procedures change over time, the Town should maintain a current funding tracker and periodically match priority projects to likely grant programs based on project type, readiness, and sponsor requirements.

Table 11 summarizes several state and federal funding sources that may be relevant to priority resilience projects identified in this assessment. Because funding requirements and schedules change over time, the Town should verify current program guidance before preparing applications.

Table 11 Potential Funding Opportunities for Priority Resilience Projects

Program	Typical Project Types	Funding/Grant Structure	Potential Relevance to Wayne
Maine Infrastructure Adaptation Fund (MIAF)[8]	Climate adaptation for existing critical infrastructure, including roads, culverts, bridges, dams, drainage systems, and other public infrastructure exposed to increased precipitation and related climate risks. (maine.gov)	MaineDOT 2026 program materials identify two categories: scoping/design grants up to $75,000 and construction grants up to $3,000,000. (maine.gov)	High relevance for priority road, culvert, bridge, dam, and public facility resilience projects identified in this assessment.
Maine Natural Resource Conservation Program (MNRCP)[9]	Aquatic resource restoration, enhancement, and protection projects, including stream restoration, shoreline stabilization, erosion reduction, habitat improvement, and some projects with broader wetland or watershed benefits. (mnrcp.org)	MNRCP states that it has no minimum or maximum funding amount and no match requirement. (mnrcp.org)	High relevance for shoreline stabilization, streambank restoration, erosion control, water-quality protection, and watershed-scale projects associated with lakes, ponds, and riparian areas.
FEMA Flood Mitigation Assistance (FMA)[10]	Projects that reduce or eliminate repetitive flood damage to buildings insured under the National Flood Insurance Program, including acquisition, elevation, mitigation reconstruction, and related building-focused flood mitigation activities. (fema.gov)	Competitive FEMA mitigation funding; award structure and annual funding levels vary by notice of funding opportunity. FEMA's currently posted FY2024 notice made up to $600 million available nationwide. (fema.gov)	Moderate relevance where Wayne or partner applicants pursue mitigation of eligible NFIP-insured flood-prone buildings or facilities.
FEMA Hazard Mitigation Grant Program (HMGP)[11]	Post-disaster hazard mitigation projects, including infrastructure protection, flood-risk reduction, planning, and other measures that reduce future disaster losses. (fema.gov)	Disaster-linked FEMA mitigation funding; availability depends on a presidentially declared disaster and subsequent state and	High relevance for larger mitigation projects if future disasters trigger HMGP availability and Wayne has

8 Maine Department of Transportation. "Adaptation." MaineDOT Climate Initiatives. https://www.maine.gov/dot/programs-services/environmental-efforts/climate-initiative/adaptation

9 Maine Natural Resource Conservation Program (MNRCP). https://www.mnrcp.org/home

10 Federal Emergency Management Agency. Flood Mitigation Assistance. https://www.fema.gov/grants/mitigation/learn/flood-mitigation-assistance

11 Federal Emergency Management Agency. Hazard Mitigation Assistance. https://www.fema.gov/grants/mitigation

		local grant processes. (fema.gov)	shovel-ready priority projects.
NOAA Climate Resilience Regional Challenge[12]	Large-scale, collaborative climate resilience initiatives that protect communities, natural resources, and working waterfronts from extreme storms, flooding, and sea-level rise. (Maine.gov)	Large Federal resilience grant awarded competitively to Maine through NOAA's Climate Resilience Regional Challenge; $69 million in funding supports multi-year, multi-partner resilience planning and implementation projects, with details on subawards and local project opportunities determined by the State and partners.	Moderate relevance where Wayne can participate as a partner or subrecipient in regional resilience initiatives funded under Maine's $69 million award, particularly projects related to coastal and inland flooding, watershed resilience, nature-based solutions, and protection of community assets.

Notes:

1 Funding programs, award amounts, eligibility criteria, match requirements, and application schedules change over time. The Town should confirm current program guidance and notices of funding opportunity before developing applications.

12 National Oceanic and Atmospheric Administration. n.d. "Climate Resilience Regional Challenge." *NOAA Office for Coastal Management*. https://www.coast.noaa.gov/funding/resilience-challenge/

6

Conclusion

This Flood Vulnerability Assessment shows that Wayne's flood-related vulnerability is concentrated in a relatively small number of locations where critical infrastructure, community facilities, and sensitive natural resources intersect current and future flood hazards. The assessment identifies several recurring patterns. Single-access and near-single-access corridors such as Coolidge Road, Gott Road, portions of North Wayne Road, Old Winthrop Road, Pond Road, and related local roads have limited redundancy, meaning that even short-duration flooding, culvert blockage, or washout can isolate residents and complicate emergency response. Priority culverts on Lord Road, North Wayne Road, Mount Pisgah Road, Walton Road, and the Coolidge Road drainage system, as well as bridge crossings at Tempy Bridge, the North Wayne Bridge on Walton Road, and Main Street over Mill Stream, are vulnerable because of overtopping, scour, debris and ice blockage, and the important access functions they serve.

The assessment also shows that Wayne's flood vulnerability extends beyond roads and crossings alone. The Wayne Village Dam and Lovejoy Pond Dam influence both upstream water levels and downstream flows, with implications for adjacent roads, structures, and emergency planning. Elevated water levels on Androscoggin Lake, Pocasset Lake, Lovejoy Pond, Wilson Pond, Dexter Pond, and Berry Pond create additional vulnerability for shorelines, septic systems, lake-adjacent roads, and public access areas through erosion, access disruption, and water quality impacts. The Ladd Recreation Center also emerges as an important community facility where flood-prone access, utility vulnerability, and emergency and public functions combine to create heightened concern.

Taken together, these findings demonstrate that flood vulnerability in Wayne is not evenly distributed across the Town, but instead is concentrated at specific roads, culverts, bridges, dams, shoreline areas, and community facilities where exposure, sensitivity, and limited adaptive capacity align. Addressing these priority focus areas will help reduce the likelihood that future flood events will isolate residents, disrupt emergency access, damage critical infrastructure, or degrade valued natural resources.

This assessment is intended to support practical, ongoing decision-making rather than serve as a one-time study. The vulnerability Ratings and recommended actions provide a planning-level foundation for capital improvement programming, maintenance planning, emergency preparedness, hazard mitigation planning, land use and shoreland management updates, and pursuit of state and federal funding. Integrating these findings into routine municipal planning

and investment decisions will help ensure that future projects and policy actions move Wayne toward greater resilience.

At the same time, the assessment should be viewed as a living resource. Flood behavior, infrastructure conditions, community needs, and funding opportunities will continue to evolve over time. Continued documentation of flood events, updates to asset condition information, targeted engineering and hydraulic analyses, and ongoing engagement with Town staff, boards and committees, emergency services, lake associations, watershed partners, and residents will help refine priorities and improve future decisions. By revisiting this assessment periodically and using it to guide phased implementation, Wayne can focus resources where they provide the greatest benefit and strengthen both community and ecosystem resilience under changing flood conditions.

7

References

Federal Emergency Management Agency. Flood Insurance Study: Androscoggin County, Maine (All Jurisdictions). Vol. 1 of 3. Washington, DC: Federal Emergency Management Agency, July 8, 2013

Federal Emergency Management Agency. Flood Insurance Study: Kennebec County, Maine (All Jurisdictions). Vol. 1 of 2. Washington, DC: Federal Emergency Management Agency, June 16, 2011

Federal Emergency Management Agency. *Multi-Hazard Loss Estimation Methodology, HAZUS–MH Technical Manual, Flood Model. Appendix I: Inland Flooding.* Washington, DC: Federal Emergency Management Agency, 2013.

State of Maine, Governor's Office of Policy Innovation and the Future. *Maine Climate Council Scientific and Technical Subcommittee Report.* Augusta, ME: State of Maine, 2024.

Maine Governor's Office of Policy Innovation and the Future. *Maine Social Vulnerability Index Dashboard – 2020.* Augusta, ME: Maine Governor's Office of Policy Innovation and the Future, 2022.

Kennebec County Emergency Management Agency. *Kennebec County Hazard Mitigation Plan.* Augusta, ME: Kennebec County Emergency Management Agency, 2021.

National Oceanic and Atmospheric Administration. "Climate Change Impacts." Washington, DC: National Oceanic and Atmospheric Administration, 2023.

U.S. Census Bureau. *ACS 5-Year Estimates, Subject Table S0101: Age by Sex – Wayne Town, Kennebec County, Maine.* Washington, DC: U.S. Census Bureau, 2020.

Maine Department of Transportation. "Climate Initiative: Adaptation." MaineDOT. Accessed May 21, 2026

Maine Natural Resource Conservation Program. "Maine Natural Resource Conservation Program." Accessed May 21, 2026.

Federal Emergency Management Agency. "Flood Mitigation Assistance (FMA) Grant." FEMA. Accessed May 21, 2026.

Federal Emergency Management Agency. "Hazard Mitigation Assistance (HMA)." FEMA. Accessed May 21, 2026

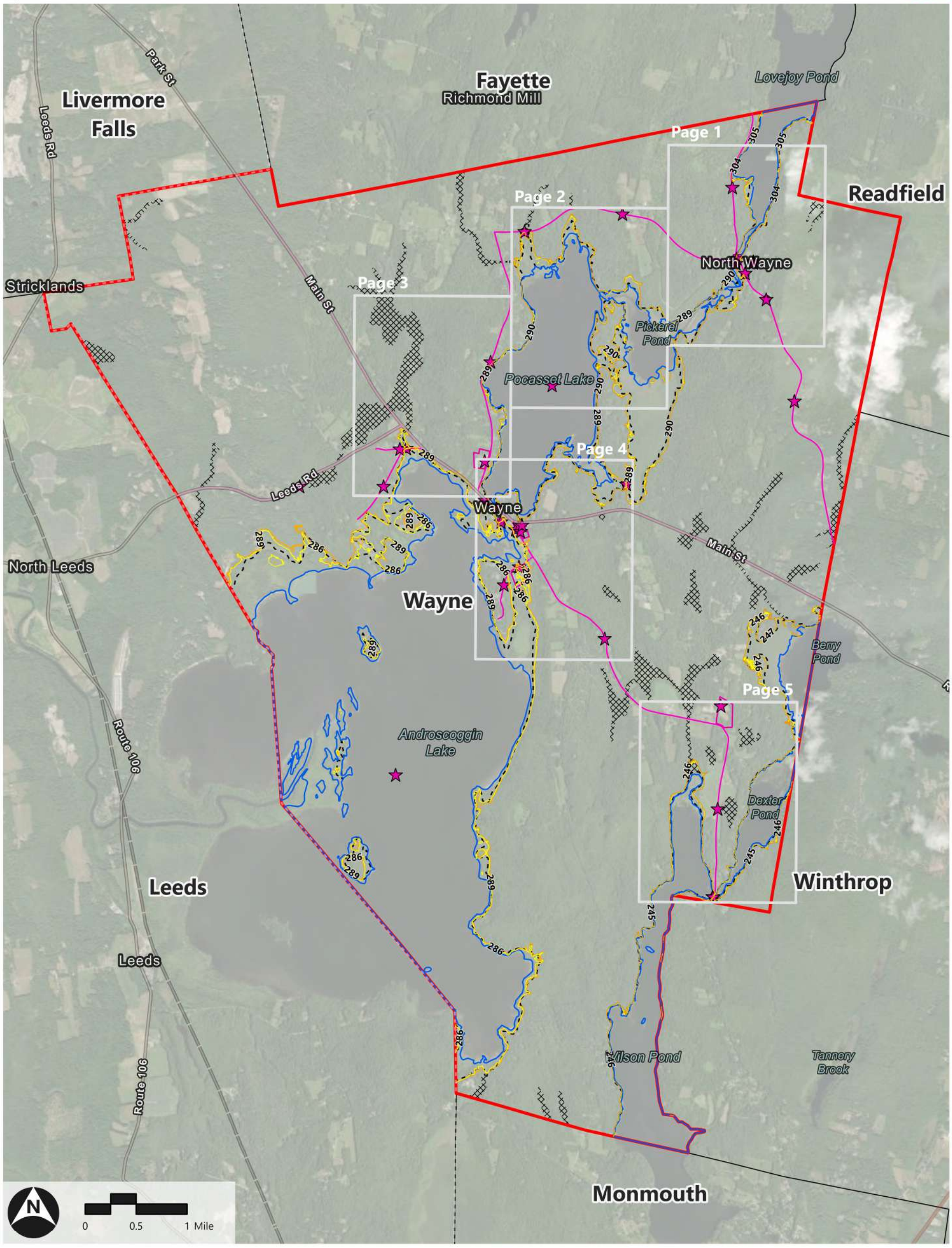
Appendices

A

Overview Map

Overview Figure: Wayne, ME Flood Vulnerability Assessment

July 02, 2026



- Critical Asset Location
- Bridge
- Dam
- Inlet Culvert
- Outlet Culvert
- Road (State Owned)
- Road (Town Owned)
- Parcel Boundary
- Pond or Lake

Source: Maine Geolibrary, FEMA, USGS

Maine 2020 Flood Elevation Contours

- 1936 Flood of Record (Androscoggin Lake)
- Current FEMA 100-year (1% AEP) flood elevation
- Current FEMA 100-year plus 1 ft increase

FEMA Flood Zones

- A Flood Zone
- AE Flood Zone

- Detail Map Areas
- Wayne Town Boundary
- Maine Township Boundary

Path: \\vhb.com\gbl\ClientGis\169845.000\Project\R169845_Wayne_Figures.aprx (mellis, 7/2/2026)

B

Inset Maps

Inset Page 1: Wayne, ME Flood Vulnerability Assessment

July 02, 2026

Lovejoy Pond

Lovejoy Pond Road

Lovejoy Pond Rd

Spruce Ln

Tall Timbers Rd

Walton Rd

Church St

Lovejoy Pond Dam

Wayne Town Office/ Fire department

North Wayne Bridge on Walton Road (near Town Office) Lovejoy Pond Outlet

North Wayne

Kents Hill Rd

N Wayne Rd. Culvert

N Wayne Rd

White Rd

Pickerel Pond

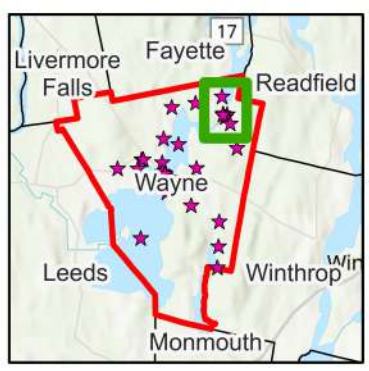
304 305 289 290

0 500 1,000 Feet

Critical Asset Location
Bridge
Dam
Inlet Culvert
Outlet Culvert
Road (State Owned)
Road (Town Owned)
Parcel Boundary
Pond or Lake

Maine 2020 Flood Elevation Contours
1936 Flood of Record (Androscoggin Lake)
Current FEMA 100-year (1% AEP) flood elevation
Current FEMA 100-year plus 1 ft increase

FEMA Flood Zones
A Flood Zone
AE Flood Zone

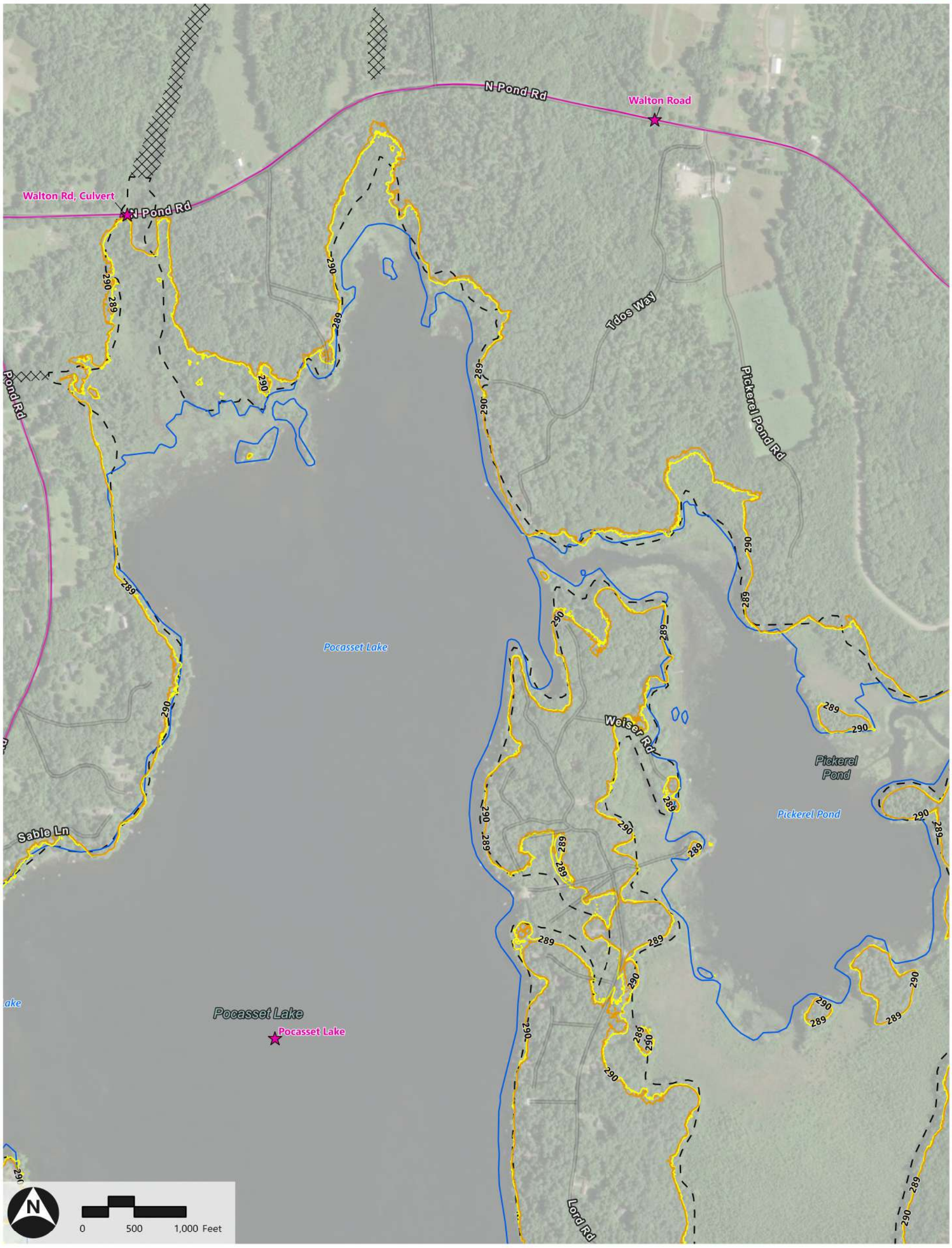


Source: Maine Geolibrary, FEMA, USGS

Path: \\vhb.com\gbl\ClientGis\169845.000\Project\R169845_Wayne_Figures.aprx (mellis, 7/2/2026)

Inset Page 2: Wayne, ME Flood Vulnerability Assessment

July 02, 2026



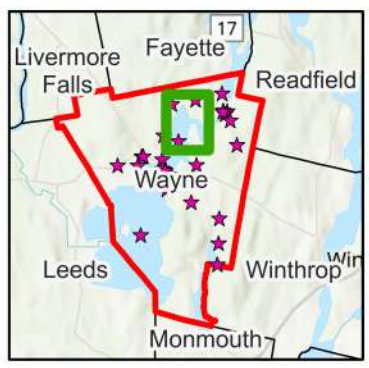
- Critical Asset Location
- Bridge
- Dam
- Inlet Culvert
- Outlet Culvert
- Road (State Owned)
- Road (Town Owned)
- Parcel Boundary
- Pond or Lake

Maine 2020 Flood Elevation Contours

- 1936 Flood of Record (Androscoggin Lake)
- Current FEMA 100-year (1% AEP) flood elevation
- Current FEMA 100-year plus 1 ft increase

FEMA Flood Zones

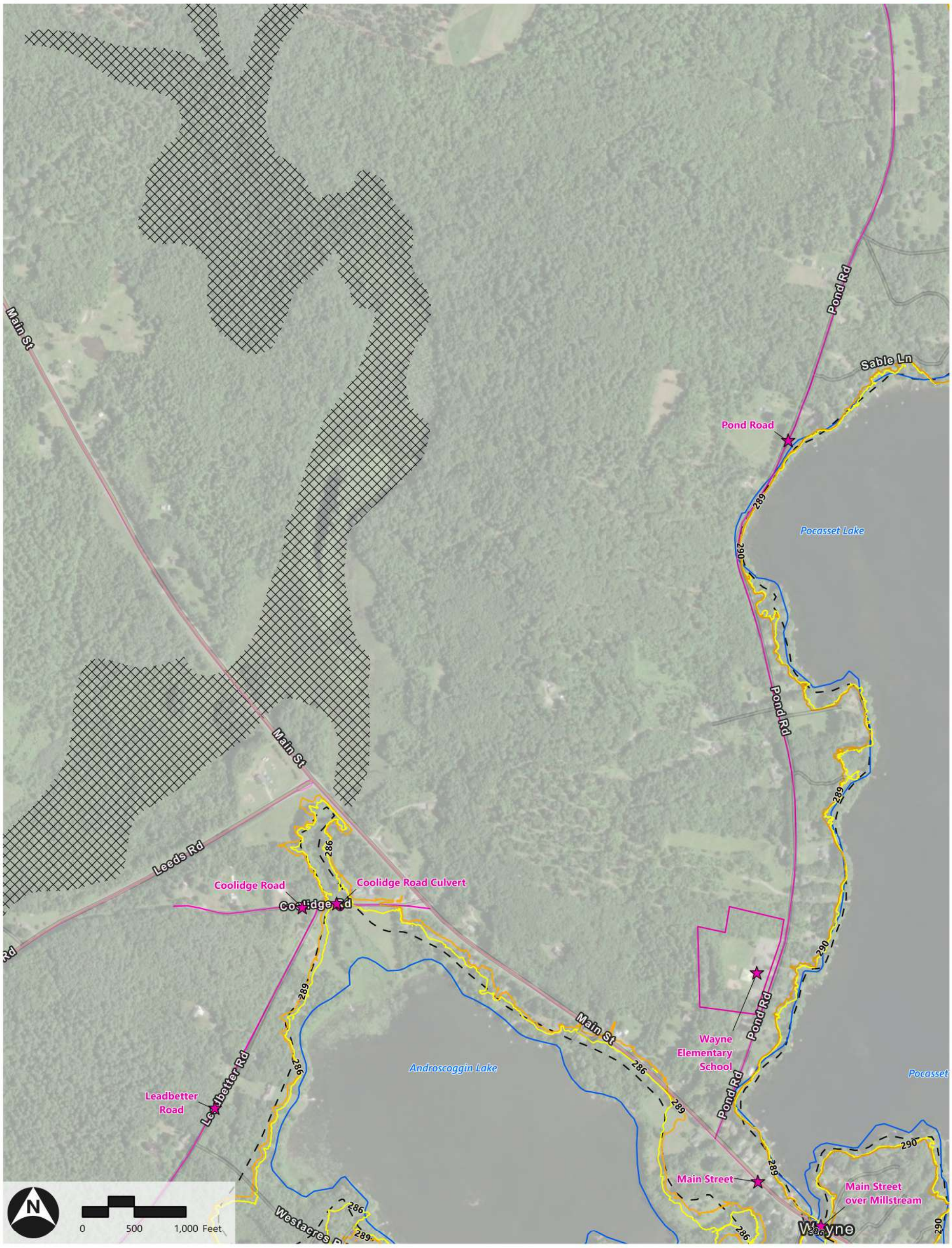
- A Flood Zone
- AE Flood Zone



Source: Maine Geolibrary, FEMA, USGS

Inset Page 3: Wayne, ME Flood Vulnerability Assessment

July 02, 2026



Path: \\vhb.com\gbl\ClientGis\169845.000\Project\R169845_Wayne_Figures.aprx (mellis, 7/2/2026)

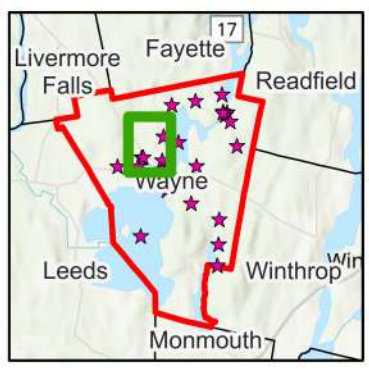
- Critical Asset Location
- Bridge
- Dam
- Inlet Culvert
- Outlet Culvert
- Road (State Owned)
- Road (Town Owned)
- Parcel Boundary
- Pond or Lake

Maine 2020 Flood Elevation Contours

- 1936 Flood of Record (Androscoggin Lake)
- Current FEMA 100-year (1% AEP) flood elevation
- Current FEMA 100-year plus 1 ft increase

FEMA Flood Zones

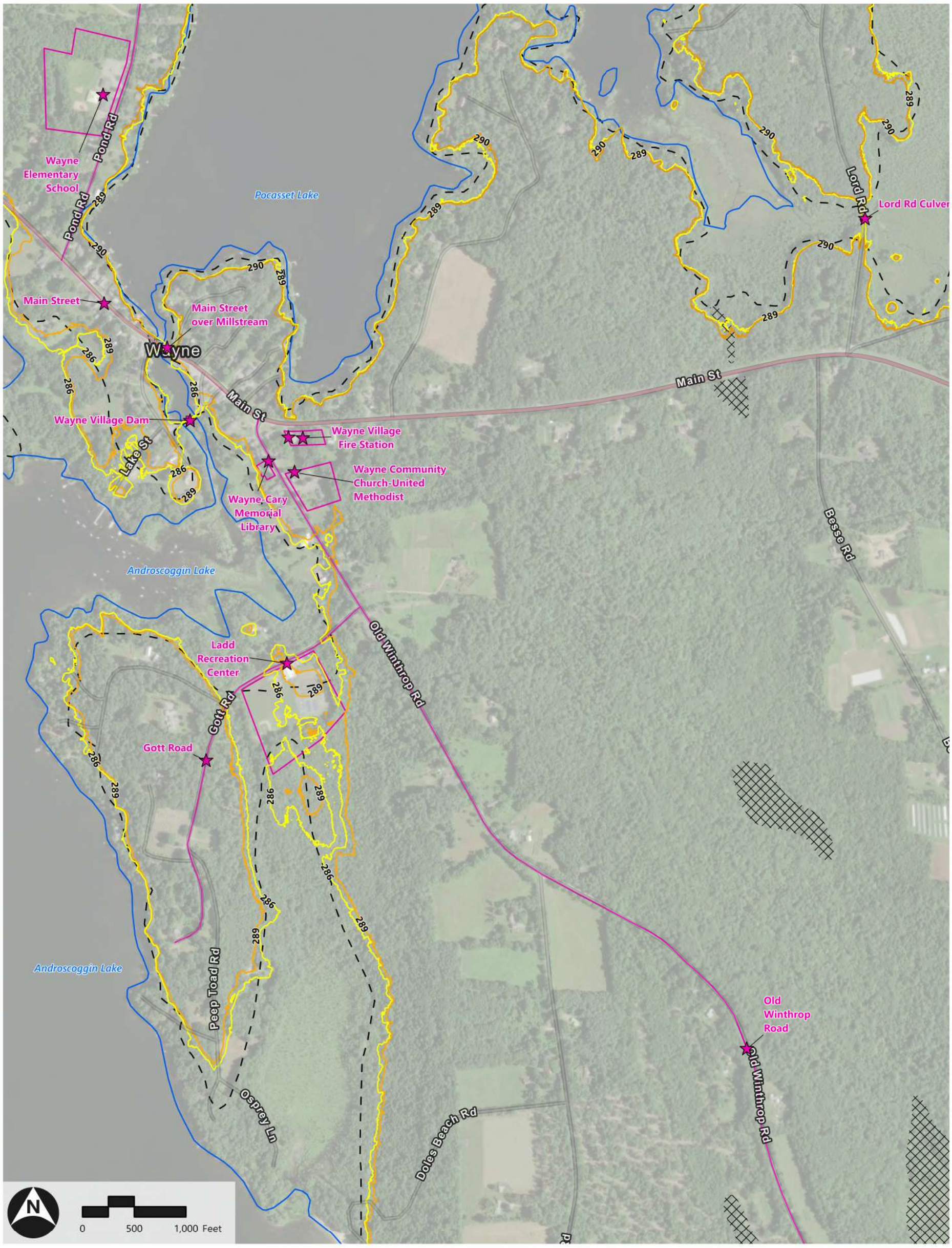
- A Flood Zone
- AE Flood Zone



Source: Maine Geolibrary, FEMA, USGS

Inset Page 4: Wayne, ME Flood Vulnerability Assessment

July 02, 2026



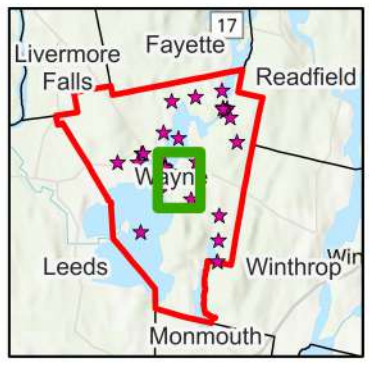
- Critical Asset Location
- Bridge
- Dam
- Inlet Culvert
- Outlet Culvert
- Road (State Owned)
- Road (Town Owned)
- Parcel Boundary
- Pond or Lake

Maine 2020 Flood Elevation Contours

- 1936 Flood of Record (Androscoggin Lake)
- Current FEMA 100-year (1% AEP) flood elevation
- Current FEMA 100-year plus 1 ft increase

FEMA Flood Zones

- A Flood Zone
- AE Flood Zone



Source: Maine Geolibrary, FEMA, USGS

Inset Page 5: Wayne, ME Flood Vulnerability Assessment

July 02, 2026

Capped Landfill

Mount Pisgah Road

Mount Pisgah Rd Culvert a.k.a. Tempy Bridge

Old Winthrop Rd

House Rd

Mount Pisgah Rd

Dexter Pond Rd

Fuller Rd

Evergreen Ln

Hemlock Ln

Craig Brook Trl

Tempy Ln

Jack-Mar Ln

Dexter Pond

Dexter Pond Rd

Wilson Pond

246

247

245

N

0 500 1,000 Feet

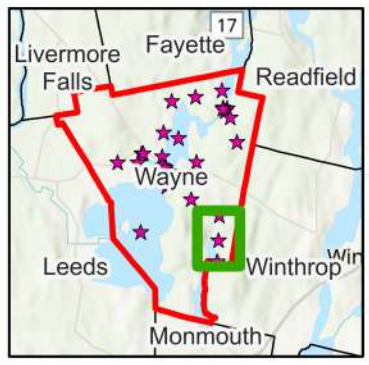
- Critical Asset Location
- Bridge
- Dam
- Inlet Culvert
- Outlet Culvert
- Road (State Owned)
- Road (Town Owned)
- Parcel Boundary
- Pond or Lake

Maine 2020 Flood Elevation Contours

- 1936 Flood of Record (Androscoggin Lake)
- Current FEMA 100-year (1% AEP) flood elevation
- Current FEMA 100-year plus 1 ft increase

FEMA Flood Zones

- A Flood Zone
- AE Flood Zone



Source: Maine Geolibrary, FEMA, USGS

Path: \\vhb.com\gbl\ClientGis\169845.000\Project\R169845_Wayne_Figures.aprx (mellis, 7/2/2026)

C

Municipal Asset Inventory

Name	Location	FEMA Disaster Declaration Coordinates	Type	Geospatial Data (Y/N)	Critical (Y/N)	Notes on Criticality	Taylor's Notes	FEMA Disaster Declaration Notes
Lord Rd Culvert	44.351939, -70.050037		Round	Y	Y	Would strand ~50 residents	Dead End,tens of year round houses, double again summer camps, low flow	
Maxim Rd. Culvert	44.349967, -70.048304		Round	Y			impacted by beavers, road susceptible if over topped, low access impact	
Kents Hill Rd. Culvert	44.374128, -70.031752	44°22'23.01"N 70°01'26.22"W	Round, Metal	Y			long detour/response if washed out, seems low flow	
N Wayne Rd. Culvert	44.353979, -70.022142		Round, Metal	Y	Y	Has had problem with capacity. On critical road.	Major through route to rt17, this culvert has backed up before, road did not overtop,	
N Wayne Rd. Culvert	44.370673, -70.030220	44.370424, -70.029985	Round, Metal	Y	Y	Has had problem with capacity. On critical road.	Steady water route, roadway appeard to have a sink hole, major route to rt17, deep culvert, impacted by beavers, road has overtopped, drains wetland	2024: Culvert Washout, reused 18" culvert
White Rd. Culvert	44.369973, -70.033622		Round, Metal	Y			dead end, only a few summer houses, low flow	
Hathaway Rd. Culvert	44.354586, -70.020024		Round, Metal	Y			no known issues, dead end with wood rd access from readfield, affects winthrop as well	
Off Mount Pisgah Rd	44.309553, -70.038001		Round, Metal	Y			private owned, might be in winthrop, recently installed, affects 2 dwellings	
Mount Pisgah Rd Culvert	44.310095, -70.037810		Pipe Arch/Elliptical Culvert, Metal	Y	Y	This is the Tempy Bridge	Major route to rt202, bad conditon, major water flow	
Main St Culvert	44.342787, -70.029692		CMP, Metal	Y			??	
Fairbanks Rd	44.343192, -70.033538	44.340456, -70.034745	Round, Plastic	Y			Road has overtopped, access available from old winthrop and main st.	2024: Culvert washout
Main St Culvert	44.344170, -70.033220		CMP, Metal	Y			??	
Greentrue Rd Culvert	44.348886, -70.032145		Unknown	Y			no known issues, low flow	
Old Schoolhouse Ln	44.349304, -70.031739		Round, Metal	Y			Private owned, affects 2 dwellings	
Walton Rd, Culvert	44.377548, -70.064553		Round, Plastic	Y	Y	It's a critical road with large runoff	Has backed up once with ice inheavy spring runoff, road overtopped.major route between schools	
Pond Rd.	44.374331, -70.067741		Bottomless Box/Bridge with Abutments, Concrete	Y	N	Signifigant:The Halesbook bridge on critical road	no known issues, has handled changing water conditions with no issues, major route between schools and arterial	
Coolidge Rd.	44.355589, -70.081321		Round, Metal	Y	Y	A bottleneck and on a critical road	Road has overtopped when beaver dam upstream was released. Typically no issues, Dead end affects tens of year round homes and a children's summer camp	
Leeds Rd.	44.354611, -70.089923		CMP, Metal	Y			no known issues, DOT road	
Strickland Ferry Rd	44.355169, -70.090285		Round, Metal	Y			Recently replaced, no known issues	
Berry Rd.	44.377999, -70.073721		Pipe Arch/Elliptical Culvert, Metal	Y	N	Signifigant: Halesbrook 2 bridge	Replaced 2001, no known issues, has handled changing water conditions	
Berry Rd.	44.378358, -70.082548		Round, Concrete	Y			deteriorating, deep culvert, handles increased runoff	
Kings Hwy.	44.374309, -70.096049		Round, Plastic	Y			replaced in last ten years, also maintains water lever for upstram pond	
Main Street Culvert	44.348165, -70.045653						Has been impacted by beavers once, drains wetland, DOT route	
Main Street Culvert	44.344170, -70.033220						no known issues, DOT Route	
Main Street Culvert	44.348049, -70.065093						would affect Fire station entrance, drains wet area, most is diverted to old winthrop rd DOT Route	
Main Street Culvert	44.357403, -70.081274						Has been impacted by beavers multiple times, drains Muddy Pond, DOT Route	
Main Street Culvert	44.370026, -70.092662						Drains Beech Hill, no known issues, seems susceptible to increased runoff	
Leeds Road Culvert	44.351450, -70.110900						No know issues, constant water, DOT Route	
Walton Road Culvert	44.379013, -70.048530						Drains substantial fields upstreamwith runoff, unlikely to overtop, major route between schools	
Walton Road Culvert	44.376794, -70.043705						Drains significant runoff, no known issues, major route between schools	
Walton Road Culvert	44.375028, -70.040308						drains runoff and wetland, has overtopped twice when plugged during runoff major route between schools	
Pond Road Culvert	44.362965, -70.070412						drains to lake, major route between schools and arterial	
Pond Road Culvert	44.354646, -70.069536						Drains major runoff from catch basin, has overtopped when plugged during runoff, major route between schools and arterial, at school	
Pond Road Culvert	44.353769, -70.069928						Drains major runoff from catch basin, major route between schools and arterial, at school	
Pond Road Culvert	44.351717, -70.071009						Drains minor runoff from catch basin, unknown status. major route between schools and arterial	
Strickland Ferry Road Culvert	44.362803, -70.102919	44°21'23.50"N 70°05'34.40"W					Drains runoff under gravel road, has washed out when plugged	2023:Culvert Washout-Severe storms and flooding washed out 1 18 in DIA plastic culvert dislodging and damaging the culvert beyond repair.
Tucker Road Culvert	44.363286, -70.108921						Drains major runoff, no known issues	
Tucker Road Culvert	44.364401, -70.108960						Drains to catch basin, drains upslope runoff, no known issues	
Tucker Road Culvert	44.367300, -70.109099						Drains major upslope runoff, no known issues	
Tucker Road Culvert	44.372102, -70.110661						drains major upslope runoff, no known issues	
Tucker Road Culvert	44.373492, -70.110905						drains major upslope runoff, no known issues	
Tucker Road Culvert	44.377844, -70.110262	44°22'37.71"N 70°06'37.68"W					Failed and replaced recently, drains major upslope runoff	2024: Culvert washout
Tucker Road Culvert	44.379334, -70.109865						Drains runoff, no known issues	
West Acres Culvert	44.349672, -70.082744						private road, dead end, suceptible to annual flooding, culvert and road flood from rising lake levels.	
Hardscrabble Road Culvert	44.312728, -70.056192						Deep culvert, long detour/response	
Old Winthrop Road Culvert	44.345729, -70.064351						Drains a major upslope stream, long detour/ response if failed, no know issues	
old winthrop road culvert	44.328845, -70.046288						Affected by beavers, drains pond/runoff	
Additional critical public culverts added by Taylor Stevenson								
Main street							486 Main Street (at Fire station entrance)	
Main street							Main street and Leeds Rd (outlet for Muddy Pond)	
Walton Rd							70 Walton Rd. (overtopped twice and on critical road)	
Pond Rd							two of them at school, drain catch basins	
Pond Rd							Near intersection of Main St.	
Hardscrabble Rd							At end of pavement. Very deep	
Old Winthrop Rd							Culvert near private retention basin at brown house ~#35	

Tab	Name	Description in GIS	Lat	Long	Geospatial	Critical (Y/N)	Notes on Criticality	Flood Exposure (Y/N)	Flood Exposure Notes
Bridge Overpass	Tempy Ln.	Mt Pisgah Rd.	44.310112	-70.037691	Y	Y		Y	Town owned bridge overpass on Mt. Pisgah Road within 100 and 200 year floodplain
Bridge Overpass	North Wayne Bridge on Walton Road (near Town Office)	Walton Road and Kents Hill Road	44.374357	-70.034458	Y	Y		Y	Town owned bridge overpass on Walton Road, within 100 and 200 year floodplain
Bridge Overpass	Main Street over Millstream	Main St and Bellefonda Road	44.34949	-70.068518	Y	Y		Y	State owned bridge overpass on Main St between Androscoggin and Pocasset Lake ni 100 and 200 year floodplain
Community Centers-Rec Facilitie	Ladd Recreation Center	26 Gott Rd, Wayne, ME 04284	44.343521	-70.065339	Y	Y		Y	Town owned rec center within the 100 and 200 year floodplain
Community Centers-Rec Facilitie	Wayne Community Church-United Methodist	22 Old Winthrop Rd, Wayne, ME 04284	44.34715	-70.065136	Y	Y		N	Not in a floodplain
Dams	Wayne Village Dam	Mill Stream	44.34812	-70.0679	Y	Y		Y	Within 100 and 200 year floodplain
Dams	Lovejoy Pond Dam	Lovejoy Stream	44.37481	-70.03436	Y	Y		Y	Within 100 and 200 year floodplain
Emergency Services	North Wayne Fire Station	14 Kents Hill Road, Wayne, ME 04284	44.374388	-70.032057	Y	Y		N	Not in a floodplain
Emergency Services	Wayne Village Fire Station	486 Main St, Wayne, ME 04284	44.347805	-70.065299	Y	Y		N	Not in a floodplain
Government Buildings	Wayne Town Office/ Fire department	14 Kents Hill Rd	44.374511	-70.032025	Y	Y		N	Not in a floodplain
Government Buildings	Wayne-Cary Memorial Library	17 Old Winthrop Rd	44.347354	-70.065826	Y	Y		N	Not in a floodplain
Government Buildings	Capped Landfill	208 Fairbanks Road	44.329427	-70.036645	Y	Y		N	Not in a floodplain
Ponds&Lakes	Androscoggin Lake		44.322439	-70.082833	Y	Y	Characterizes the identity of the	Y	
Ponds&Lakes	Pocasset Lake		44.361977	-70.060647	Y	Y	Characterizes the identity of the	Y	
Public Schools	Wayne Elementary School	48 Pond Rd, Wayne, ME 04284	44.354282	-70.0702	Y	Y	Catch basins effectively	N	Not in a floodplain
Roads	Coolidge Road	Main Street to End	44.355574	-70.081411	Y	Y	Dead end. Boys camp	Y	Coolidge Road to Leadbetter Road, Coolidge culvert in 100 and 200 year flood plain
Roads	Gott Road	Old Winthrop Road to End	44.343276	-70.066217	Y	Y	Dead end. Ladd Center	Y	Only a small portion of the road is within the flood plain
Roads	Leadbetter Road	Coolidge Road to End	44.350094	-70.086006	Y	Y	Boys camp	N	Not technically in a floodplain but very close
Roads	Lovejoy Pond Road	Walton Road to Fayette T.L.	44.383612	-70.035093	Y	Y	Major thoroughfare to Rte 17	N	Not in a floodplain (just outside)
Roads	Mount Pisgah Road	Old Winthrop Road to Winthrop T.L.	44.310064	-70.037668	Y	Y	Major through way to Rte 202	Y	In 100 and 200 year flood plain where Tempy bridge overpass is located.
Roads	North Wayne Road	Kents Hill Road to Winthrop T.L.	44.347132	-70.021153	Y	Y	Major thoroughfare to Rte 17	Y	Small portion of road in Zone A between 435 N Wayne Road and the town line.
Roads	Old Winthrop Road	Main Street to Fairbanks Road	44.346686	-70.065153	Y	Y	Major through way to Rte 202	Y	Low lying area in the 100 and 200 year floodplain. 37 Old Winthrop Road
Roads	Walton Road	Pond Road to North Wayne Road	44.379421	-70.050811	Y	Y	School route	Y	Walton Road culvert in the 100 and 200 year floodplain as well as North Wayne Bridge
Roads	Main Street	Park Street to Route 133	44.349031	-70.05452	Y	Y	Critical even though state Rd	Y	Main Street bridge overpass in the 100 and 200 year floodplains as well as 2 other locations to the northwest
Roads	Leeds Road (Rte 219)				Y	Y	Critical even though state Rd	N	Not in a floodplain
Roads	Pond Road	Main Street to Walton Road			Y	Y	School route	Y	Very small portion in the 100 and 200 year floodplain here: 44.3623799, -70.0706872 and Pond Road culvert is in Zone A.
Stormwater drainage infra.	Lord Rd Culvert		44.351939	-70.050037	Y	Y	Would strand ~50 residents	Y	Lord Road culvert is in the 100 and 200 year floodplain
Stormwater drainage infra.	N Wayne Rd. Culvert		44.37333	-70.033202	Y	Y	Has had problem with capacity.	N	Not in a floodplain
Stormwater drainage infra.	N Wayne Rd. Culvert		44.370673	-70.03022	Y	Y	Has had problem with capacity.	N	Not in a floodplain, 68 North Wayne Road
Stormwater drainage infra.	Mount Pisgah Rd Culvert		44.310095	-70.03781	Y	Y	This is the Tempy Bridge	Y	In the 100 and 200 year floodplain
Stormwater drainage infra.	Walton Rd, Culvert		44.377548	-70.064553	Y	Y	It's a critical road with large	Y	In the 100 year floodplain
Stormwater drainage infra.	Coolidge Rd.		44.355589	-70.081321	Y	Y	A bottleneck and on a critical	Y	In the 100 year floodplain

Row Labels	Sum of Count
Bridge Overpass	3
Community Centers-Rec Facilitie	2
Dams	2
Emergency Services	2
Government Buildings	4
Ponds&Lakes	2
Public Schools	1
Roads	11
Stormwater drainage infra.	6
(blank)	
Grand Total	**33**

Category/Asset	Present (Y/N)	Publicly Owned (Y/N)	Geospatial Data Available (Y/N)	Data Source	Location in Data Source	Notes	Notes
Infrastructure							
Transportation							
Roads	Y	Y	Y	Comprehensive Plan 2016 Final.pdf	Page 56	Ownership also includes MaineDOT	
Bridges and overpasses	Y	Y	Y	Comprehensive Plan 2016 Final.pdf	Page 59	Data source is MaineDOT	
Rail lines and stations	N	N	N				
Public transit facilities (bus depots)	N	N	N	Comprehensive Plan 2016 Final.pdf	Page 60		
Air Transportation	N	N	N	Comprehensive Plan 2016 Final.pdf	Page 60		
Utilities							
Water supply systems (treatment plants, pumping stations)	N	N	N	Comprehensive Plan 2016 Final.pdf	Page 48	Almost all residents use wells	
Wastewater treatment plants	N	N	N	Comprehensive Plan 2016 Final.pdf	Page 48		
Stormwater drainage systems (including culverts)	Y	Y	Y	Comprehensive Plan 2016 Final.pdf	Page 53-54	Ownership also includes MaineDOT, all culverts are under MaineDOT roads. https://experience.arcgis.com/template/44bf3987901641569a65a938fcffa8ce	Roadside ditches are used to convey stormwater from public and private roads
Distribution facilities	N	N	N				
Telecommunications infrastructure (fiber optic lines, cell towers)	Y	N	N				
Public Buildings							
Schools and universities	Y	Y					
Libraries	Y	N	N	Comprehensive Plan 2016 Final.pdf	Page 45	Privately owned	
Government offices	Y	Y	N	Comprehensive Plan 2016 Final.pdf			
Emergency services (fire stations, police stations)	Y	Y	N	Comprehensive Plan 2016 Final.pdf	Page 47-48	2 publicly owned volunteer fire stations, contract with the Maine state police and Kennebec County Sheriff's Office	
Solid waste facility	Y	Y	N	Comprehensive Plan 2016 Final.pdf	Page 49	Readfield and Wayne share operating costs of the Readfield/ Wayne Recycling Center & Solid Waste Facility located in Readfield	
Critical Facilities							
Environmental							
Urban green spaces and parks	Y	Y	N	Comprehensive Plan 2016 Final.pdf	Page 51- 52		
Publicly owned reservoirs and retention basins							
Public conservation lands	Y	Y	Y	Comprehensive Plan 2016 Final.pdf	Page 22	Map of conserved land in Wayne, ME	*The town does not have any significant holdings of open and conservation land as many other municipalities do. There is currently no mechanism for town funding of the purchase of land or conservation easements to protect forest or agricultural land or lands that have important conservation values.*
Social							
Public schools	Y	Y	N				
Community centers and recreation facilities	Y	Y	N		Page 51- 52	Ladd Center is owned by the Town; however, it is managed by a private board and privately financed with funds from several sources, including the Ladd family.	
Public health infrastructure (clinics, vaccination sites)							
Social service offices (housing assistance, food distribution)							
Public transportation hubs	N	N	N				
Cultural institutions (museums, theaters)	N	N	N				
Public housing and affordable housing developments							
Historical properties or areas	Y	N	Y	R169845.000 Wayne/Flood Vulnerability Assessment Experience			
Public Cemetaries	Y	Y	Y	AxisGIS - WayneME			

Highway	Description	Type	Miles	Geospatial Data (Y/N)	Critical (Y/N)	Notes on Criticality	FEMA Disaster Declaration Notes	FEMA Disaster Declaration Coordinates	Criticality Definition
Berry Road	Kings Highway to Pond Road	Paved	1.24	Y			Shoulder washed out (2023)	44.3776040, -70.0715897	**Criticality**: A critical publicly owned asset is any physical, operational, or functional component of public infrastructure or services that is essential for sustaining community continuity, safety, and resilience. If this asset were damaged or disrupted by climate-related impacts, it would cause significant interruptions to essential public services, economic activity, public safety, or environmental quality.
Besse Road	Main Street to End	Both	0.51	Y					**Key Considerations for Determining Criticality:**
Bridge Street	Main Street to Main Street	Paved	0.08	Y					**1. Function or Service Dependence – Is the asset necessary for core operations and delivery of essential services?**
Christmas Tree Lane	Main Street to End	Gravel	0.08	Y					**2. Safety and Risk to Life** – Does the asset support or protect human life or health?
Church Street	Kents Hill Road to End	Paved	0.11	Y					**3. Economic Impact** – Would asset failure disrupt economic activity?
Coolidge Road	Main Street to End	Both	0.33	Y	Y	Dead end. Boys camp			**4. Natural Resource Function** – Does the asset (or resource) provide ecological services that protect community health, safety, or resilience (e.g., stormwater management, habitat, air/water quality)
Cross Road	Main Street to Winthrop T.L.	Paved	0.12	Y					**5. Interdependence** – Is the asset required for other critical assets to function properly?
Dexter Pond Road	Mount Pisgah Road to Winthrop T.L.	Gravel	0.58	Y					**6. Replacement Difficulty** – Is the asset costly or time-sensitive to repair or replace?
Fairbanks Road	Main Street to Old Winthrop Road	Paved	1.18	Y					
Farnham Road	North Wayne Road to End	Gravel	0.12	Y					
Gott Road	Old Winthrop Road to End	Paved	0.53	Y	Y	Dead end. Ladd Center			
Green True Road	Main Street to End	Paved	0.64	Y			2024: Driveway washout in town ROW	44.353306, -70.031054	
Hardscrabble Road	Morrison Heights Road to Monmouth T.L.	Paved	2.38	Y			Shoulder gravel washout, grading only, using existing materials.	Start: 44.33147333, -70.0573480 End: 44.313886, -70.0056874	
Hathaway Road	North Wayne Road to Winthrop T.L.	Paved	0.21	Y					
House Road	Old Winthrop Road to End	Gravel	0.4	Y			2023: Gravel washout, grading only, using existing materials. 2024: Shoulder washout	2023: Start: 44.3327626, -70.047918 End: 44.325544, -70.048108 2024: 44.325421, -70.048061	
Innes Ridge Road	Kents Hill Road to Readfield T.L.	Paved	0.53	Y					
Kents Hill Road	North Wayne Road to End	Paved	0.86	Y			2024: Shoulder washout	44.373458, -70.025794	
Kings Highway	Main Street to Berry Road	Paved	0.51	Y					
Lake Shore Road	Leeds Road to Leeds T.L.	Paved	0.62	Y					
Lake Street	Memorial Pak Lane to End	Paved	0.09	Y					
Leadbetter Road	Coolidge Road to End	Paved	0.6	Y	Y	Boys camp			
Lincoln Point Road	Hardscrabble Road to Private Road	Both	0.23	Y			Road gravel washout, grading only, using existing materials	Start: 44.317857, -70.0597440 End: 44.318141, -70.0059208	
Lord Road	Main Street to End	Both	0.69	Y					
Lovejoy Pond Road	Walton Road to Fayette T.L.	Paved	1.08	Y	Y	Major thoroughfare to Rte 17	2024: Shoulder washout	44.383380, -70.035129	
Maxim Road	Lord Road to Green True Road	Gravel	0.95	Y			2024: Shoulder washout	44.350890, -70.041941	
Memorial Park Lane	Main Street to End	Paved	0.15	Y					
Morrison Heights Road	Old Winthrop Road to Hardscrabble Road	Paved	1.45	Y			2024: Shoulder washout	44.331421, -70.058248	
Mount Pisgah Road	Old Winthrop Road to Winthrop T.L.	Paved	1.31	Y	Y	Major through way to Rte 202			
North Wayne Road	Kents Hill Road to Winthrop T.L.	Paved	2.26	Y	Y	Major thoroughfare to Rte 17	2024: Shoulder washout, 2024: Above cemetary,	44.349678, -70.021795 Above cemetery: 44.370424, -70.029985	
Old Winthrop Road	Main Street to Fairbanks Road	Paved	2.96	Y	Y	Major through way to Rte 202	April/May 2023: Severe storms, high flood waters and torrential rains washed out surface roadway and shoulder gravel materials (FEMA Declaration 2023-07-06)	Start: 44.3281874, -70.0423375 End: 44.328155, -70.041284	
Pond Road	Main Street to Walton Road	Paved	1.91	Y	Y	School route			
Richmond Mills Road	Walton Road to Fayette T.L.	Paved	0.49	Y					
Strickland Ferry Road	Leeds Road to Tucker Road	Gravel	1.23	Y			2024: Shoulder washout	44.359813, -70.096237	
Tucker Road	Strickland Ferry Road to Livermore Falls T.L.	Gravel	1.38	Y			April/May 2023: Gravel washout site, road surface failure due to heavy rain conditions, heavy traffic conditions and existing detour off Route 133 (FEMA Declaration 2023-07-06)	Start: 44.3675389, -70.1090812 End: 44.365155, -70.108939	
Walton Road	Pond Road to North Wayne Road	Paved	1.9	Y	Y	School route			
Whispering Pines Circle	Lake Shore Road to End	Gravel	0.23	Y					
White Road	North Wayne Road to End	Gravel	0.5	Y					
Fuller Road	Mt Pisgah Road to End	Dirt	0.43	Y					
Main Street (Rt133) MDOT		Paved	~5.45	Y	Y	Critical even though state Rd			Measured on Nearmap for approximate miles
Leeds Road (Rt219) MDOT		Paved	~2.42	Y	Y	Critical even though state Rd			Measured on Nearmap for approximate miles
Total			**30.87**						
Total Road Miles for Main St and Leeds Road			**38.74**						

Kents Hill Road @ Tall Timbers Road — Catch basin drain and washout — 44.374142, -70.031325

North Wayne Road @ Howard Hill Road — Shoulder washout — 44.365563, -70.027520

Name	Address	Location	Water Body	Geospatial Data (Y/N)	Critical (Y/N)	Notes on Criticality
Job Fuller	Old Winthrop Rd	44.328863, -70.046299	Manter Brook	Y	N	significant
Hales Brook	Pond Rd	44.374681, -70.067793	Hales Brook	Y	N	significant
Hales Brook#2	Berry Road	44.378041, -70.073631	Hales Brook	Y	N	significant
Tempy	Mt Pisagh Rd.	44.309812, -70.038122	Wilson/ Dexter Ponds	Y	Y	
North Wayne	Walton Road	44.374373, -70.034448	Lovejoy Pond Outlet			
Main Street	Main Street	44.349480, -70.068589	Mill Stream		Y	
					Y	

Name	Location	FEMA Disaster Declaration Coordinates	Type	Geospatial Data (Y/N)	Critical (Y/N)	Notes on Criticality	Taylor's Notes	FEMA Disaster Declaration Notes
Lord Rd Culvert	44.351939, -70.050037		Round	Y	Y	Would strand ~50 residents	Dead End,tens of year round houses, double again summer camps, low flow	
Maxim Rd. Culvert	44.349967, -70.048304		Round	Y			impacted by beavers, road susceptible if over topped, low access impact	
Kents Hill Rd. Culvert	44.374128, -70.031752	44°22'23.01"N 70°01'26.22"W	Round, Metal	Y			long detour/response if washed out, seems low flow	
N Wayne Rd. Culvert	44.353979, -70.022142		Round, Metal	Y	Y	Has had problem with capacity. On critical road.	Major through route to rt17, this culvert has backed up before, road did not overtop,	
N Wayne Rd. Culvert	44.370673, -70.030220	44.370424, -70.029985	Round, Metal	Y	Y	Has had problem with capacity. On critical road.	Steady water route, roadway appeard to have a sink hole, major route to rt17, deep culvert, impacted by beavers, road has overtopped, drains wetland	2024: Culvert Washout, reused 18" culvert
White Rd. Culvert	44.369973, -70.033622		Round, Metal	Y			dead end, only a few summer houses, low flow	
Hathaway Rd. Culvert	44.354586, -70.020024		Round, Metal	Y			no known issues, dead end with wood rd access from readfield, affects winthrop as well	
Off Mount Pisgah Rd	44.309553, -70.038001		Round, Metal	Y			private owned, might be in winthrop, recently installed, affects 2 dwellings	
Mount Pisgah Rd Culvert	44.310095, -70.037810		Pipe Arch/Elliptical Culvert, Metal	Y	Y	This is the Tempy Bridge	Major route to rt202, bad conditon, major water flow	
Main St Culvert	44.342787, -70.029692		CMP, Metal	Y			??	
Fairbanks Rd	44.343192, -70.033538	44.340456, -70.034745	Round, Plastic	Y			Road has overtopped, access available from old winthrop and main st.	2024: Culvert washout
Main St Culvert	44.344170, -70.033220		CMP, Metal	Y			??	
Greentrue Rd Culvert	44.348886, -70.032145		Unknown	Y			no known issues, low flow	
Old Schoolhouse Ln	44.349304, -70.031739		Round, Metal	Y			Private owned, affects 2 dwellings	
Walton Rd, Culvert	44.377548, -70.064553		Round, Plastic	Y	Y	It's a critical road with large runoff	Has backed up once with ice inheavy spring runoff, road overtopped.major route between schools	
Pond Rd.	44.374331, -70.067741		Bottomless Box/Bridge with Abutments, Concrete	Y	N	Signifigant:The Halesbook bridge on critical road	no known issues, has handled changing water conditions with no issues, major route between schools and arterial	
Coolidge Rd.	44.355589, -70.081321		Round, Metal	Y	Y	A bottleneck and on a critical road	Road has overtopped when beaver dam upstream was released. Typically no issues, Dead end affects tens of year round homes and a children's summer camp	
Leeds Rd.	44.354611, -70.089923		CMP, Metal	Y			no known issues, DOT road	
Strickland Ferry Rd	44.355169, -70.090285		Round, Metal	Y			Recently replaced, no known issues	
Berry Rd.	44.377999, -70.073721		Pipe Arch/Elliptical Culvert, Metal	Y	N	Signifigant: Halesbrook 2 bridge	Replaced 2001, no known issues, has handled changing water conditions	
Berry Rd.	44.378358, -70.082548		Round, Concrete	Y			deteriorating, deep culvert, handles increased runoff	
Kings Hwy.	44.374309, -70.096049		Round, Plastic	Y			replaced in last ten years, also maintains water lever for upstram pond	
Main Street Culvert	44.348165, -70.045653						Has been impacted by beavers once, drains wetland, DOT route	
Main Street Culvert	44.344170, -70.033220						no known issues, DOT Route	
Main Street Culvert	44.348049, -70.065093						would affect Fire station entrance, drains wet area, most is diverted to old winthrop rd DOT Route	
Main Street Culvert	44.357403, -70.081274						Has been impacted by beavers multiple times, drains Muddy Pond, DOT Route	
Main Street Culvert	44.370026, -70.092662						Drains Beech Hill, no known issues, seems susceptible to increased runoff	
Leeds Road Culvert	44.351450, -70.110900						No know issues, constant water, DOT Route	
Walton Road Culvert	44.379013, -70.048530						Drains substantial fields upstreamwith runoff, unlikely to overtop, major route between schools	
Walton Road Culvert	44.376794, -70.043705						Drains significant runoff, no known issues, major route between schools	
Walton Road Culvert	44.375028, -70.040308						drains runoff and wetland, has overtopped twice when plugged during runoff major route between schools	
Pond Road Culvert	44.362965, -70.070412						drains to lake, major route between schools and arterial	
Pond Road Culvert	44.354646, -70.069536						Drains major runoff from catch basin, has overtopped when plugged during runoff, major route between schools and arterial, at school	
Pond Road Culvert	44.353769, -70.069928						Drains major runoff from catch basin, major route between schools and arterial, at school	
Pond Road Culvert	44.351717, -70.071009						Drains minor runoff from catch basin, unknown status. major route between schools and arterial	
Strickland Ferry Road Culvert	44.362803, -70.102919	44°21'23.50"N 70°05'34.40"W					Drains runoff under gravel road, has washed out when plugged	2023:Culvert Washout-Severe storms and flooding washed out 1 18 in DIA plastic culvert dislodging and damaging the culvert beyond repair.
Tucker Road Culvert	44.363286, -70.108921						Drains major runoff, no known issues	
Tucker Road Culvert	44.364401, -70.108960						Drains to catch basin, drains upslope runoff, no known issues	
Tucker Road Culvert	44.367300, -70.109099						Drains major upslope runoff, no known issues	
Tucker Road Culvert	44.372102, -70.110661						drains major upslope runoff, no known issues	
Tucker Road Culvert	44.373492, -70.110905						drains major upslope runoff, no known issues	
Tucker Road Culvert	44.377844, -70.110262	44°22'37.71"N 70°06'37.68"W					Failed and replaced recently, drains major upslope runoff	2024: Culvert washout
Tucker Road Culvert	44.379334, -70.109865						Drains runoff, no known issues	
West Acres Culvert	44.349672, -70.082744						private road, dead end, suceptible to annual flooding, culvert and road flood from rising lake levels.	
Hardscrabble Road Culvert	44.312728, -70.056192						Deep culvert, long detour/response	
Old Winthrop Road Culvert	44.345729, -70.064351						Drains a major upslope stream, long detour/ response if failed, no know issues	
old winthrop road culvert	44.328845, -70.046288						Affected by beavers, drains pond/runoff	
Additional critical public culverts added by Taylor Stevenson								
Main street							486 Main Street (at Fire station entrance)	
Main street							Main street and Leeds Rd (outlet for Muddy Pond)	
Walton Rd							70 Walton Rd. (overtopped twice and on critical road)	
Pond Rd							two of them at school, drain catch basins	
Pond Rd							Near intersection of Main St.	
Hardscrabble Rd							At end of pavement. Very deep	
Old Winthrop Rd							Culvert near private retention basin at brown house ~#35	

Building	Address	Location	Geospatial Data (Y/N)	Critical (Y/N)	Notes on Criticality	Notes
Wayne Elementary School	48 Pond Rd, Wayne, ME 04284	44.354282, -70.070200	Y	Y	Catch basins effectively manage run off from hill	This is not technically a town asset. It is owned by the RSU. We view it as a critical asset though.

Building	Address	Location	Geospatial Data (Y/N)	Critical (Y/N)	Notes on Criticality
Wayne Town Office/ Fire department	14 Kents Hill Rd	44.374511, -70.032025	Y	Y	
Old Town Office	3 Lovejoy Pond Road	44.374828, -70.034776	Y	N	
Wayne Town House	595 ME-133	44.352866, -70.073311	Y	N	
Wayne-Cary Memorial Library	17 Old Winthrop Rd	44.347354, -70.065826	Y	Y	Not town owned. Contains archives
Sand/Salt Shed	208 Fairbanks Road	44.329427, -70.036645	Y	N	
Capped Landfill	208 Fairbanks Road	44.329427, -70.036645	Y	Y	Would flow into Berry Pond
Fire Department	486 Main Street	44.347992, -70.065315		Y	
Old School House	15? Kent's Hill Road	44.374063, -70.032312		N	

Name	Location	River	Geospatial Data (Y/N)	Critical (Y/N)	Notes on Criticality
Wayne Village Dam	44.34812, -70.06790	Mill Stream	Y	Y	
Lovejoy Pond Dam	44.37481, -70.03436	Lovejoy Stream	Y	Y	

Wayne Fire Department	Address	Location	Geospatial Data (Y/N)	Critical (Y/N)	Notes on Criticality
North Wayne Fire Station	14 Kents Hill Road, Wayne, ME 04284	44.374388, -70.032057	Y	Y	
Wayne Village Fire Station	486 Main St, Wayne, ME 04284	44.347805, -70.065299	Y	Y	

Green Spaces	Address	Location	Geospatial Data (Y/N)	Critical (Y/N)	Notes on Criticality	Notes
North Wayne Dam Recreation Area	N Wayne Road	44.374310, -70.034664	Y	N		
Memorial Park	Main Street	44.349774, -70.068928	Y	N	On Main St, not Memorial Park Ln.	
Wayne's 100-Acre Wood	Mt Pisgah Road	44.291888, -70.048112	Y	N		
Kennebec Land Trust properties			Y	N		
Helen Hicks Healy Trails behind Ladd Rec Center	Gott Road	44.343521, -70.065339	Y	N		
Roderick Park	Memorial Park Lane	44.348616, -70.068973				
Park by Post office	Main Street	44.349241, -70.068182		N		Used for Farmer's Market
				N		

Waterbody	Lake Surface Area (Acres)	Watershed Area (Acres)	Percent of Watershed in Wayne	Location	Geospatial Data (Y/N)	Critical (Y/N)	Notes on Criticality
Berry Pond	168	1,913	40%	44.333175, -70.024012	Y		
Androscoggin Lake	3,993	4,087	35%	44.322439, -70.082833	Y	Y	Characterizes the identity of the town
Lovejoy Pond	348	435	15%	44.386047, -70.030375	Y		
Pickerel Pond	148	1,248	100%	44.366272, -70.047386	Y		
Pocasset Lake	566	2,011	100%	44.361977, -70.060647	Y	Y	Characterizes the identity of the town
Dexter Pond	104	242	40%	44.318297, -70.031374	Y		
Wilson Pond	551	1,287	30%	44.290712, -70.048905	Y		
Muddy Pond	11		100%	44.363054, -70.081543	Y		

Recreational Facilities	Address	Location	Geospatial Data (Y/N)	Critical (Y/N)	Notes on Criticality
Ladd Recreation Center	26 Gott Rd, Wayne, ME 04284	44.343521, -70.065339	Y	Y	
Lake Street Boat Launch	22 Lake St, Wayne, ME 04284	44.346781, -70.069796	Y	N	
Wayne Community Church-United Methodist	22 Old Winthrop Rd, Wayne, ME 04284	44.347150, -70.065136	Y	Y	Not town owned
Main St. boat launch (state-owned)				N	Not town owned
Camp Androscoggin				N	Not town owned
Yogi Bear's Jellystone Park and Camp				N	Not town owned

Name	Location	Geospatial Data (Y/N)	Critical (Y/N)	Notes on Criticality	Notes
Evergreen Cemetery	432 Old Winthrop Rd	Y	N	Not town owned	*Does not show up when plugged into Maps, but is at the address given. At the corner of Fairbanks and Old Winthrop.*
Gordon Cemetery	123 Berry Road Wayne, ME 04284	Y	N	Not town owned	
Lakeshore Cemetery	Lake Shore Road/ 409 Cove Road Wayne, ME 04284	Y	N	Not town owned	
Beech Hill Cemetery	229 Strickland Ferry Rd, Wayne, ME 04284	Y	N	Not town owned	
Revolutionary Wood (Old Town) Cemetery	Near 220 Berry Street, Wayne, ME 04284	Y	N	Not town owned	
North Wayne Cemetery	62 North Wayne Rd, Wayne, ME 04284	Y	N	Not town owned	

D

Vulnerability Matrix

Asset Type	Name	Sensitivity Questions	Example Findings	Sensitivity Notes (Kennebec County Hazard Mitigation Plan)	Sensitivity Notes (Asset Specific)	Sensitivity Score	Adaptive Capacity Questions	Example Findings	Adaptive Capacity Notes (Kennebec County Hazard Mitigation Plan)	Adaptive Capacity Notes	Adaptive Capacity Score
Bridge Overpass	Tempy Bridge (Mt. Pisgah Road Culvert)	- At what conditions does the bridge or roadway overtop? - Are the approaches prone to washout or undermining? - What is the risk of scour at abutments, piers, wingwalls, or footings? - Does the opening commonly trap debris or ice, causing backwater?	- High flows can overtop the roadway and damage approaches, leading to closure. - Debris or ice can restrict the opening, causing upstream flooding and increasing scour risk. - Closure would have high consequences due to limited detours and impacts to emergency access.	- Flooding is a high-priority hazard with repeated damages; transportation access loss is a documented community impact. -Spring flooding/backwater conditions in the basin can increase duration of high water, raising the consequence of closures.	- Approximately 1 ft above the FEMA floodplain; bridge overtops at approaches in flood events greater than 100-year. - Higher probability of washing out. - Beaver activity causes debris buildup and backups. -Used for recreational passage; only access to boat launch for landowners on Dexter Pond. -Currently in poor condition	S3	- How recent are inspections, and are scour protections in place and adequate? - How quickly can staff monitor, post, and close the crossing during storms? - Is there a detour plan with ready signage and public notification? - How quickly can debris be cleared (equipment access, staffing, vendors)? - Can the Town rapidly fund and contract emergency stabilization and repairs?	- Capacity is good where inspections are routine, scour protection exists, and the site is accessible for rapid debris removal. - Capacity is limited if closures are slow to implement, detours are poor, or repairs require specialized contractors and long lead times.	- Countywide mitigation strategy prioritizes protecting/upgrading vulnerable infrastructure; bridges/approaches align with that focus. - County EMA support helps with technical assistance, funding strategy, and post-event coordination; however, funding constraints can slow capital repairs.	- MaineDOT performing increased inspections due to poor condition (even though it's a Town-owned road). - Rapid response with detour signage. - No evacuation plan. - Limited funding for emergency stabilization. - Included in the hazard mitigation plan.	AC0
Bridge Overpass	North Wayne Bridge on Walton Road (Town-owned road; MaineDOT bridge #2624)	- If closed, what are the service impacts (emergency response delays, long detours, isolation)? - Are there utilities attached (power/communications) that increase consequences if damaged?			- Replacement would be significant in terms of cost and timing. - MaineDOT rating shows risk of scour.	S3				- Substantial abutments. - Rapid response; detour would require DOT coordination. - No evacuation plan. - MaineDOT owns & maintains the bridge. Constructed 1931. MaineDOT would be responsible for replacing.	AC2
Bridge Overpass	Main Street (Route 133) over Mill Stream (State-owned road & bridge [#3227])				- If closed, would require major rerouting; this is a major state route. - Used for recreational passage. - The only three-phase electrical utility lines in Wayne run along Rt 133, utility poles are along either side of this bridge	S4				- Recently rebuilt by DOT and raised. - Substantial abutments. - Rapid response; detour would require DOT coordination. - No evacuation plan. - MaineDOT owned & maintained; constructed 1966; superstructure replacement 2004; mill & overlay 2020.	AC3
Community Centers-Rec Facilities	Ladd Recreation Center	- Is the building located in a flood-prone area, and can floodwater reach the lowest floor or basement? - Where are critical systems (electrical, boilers, IT, alarms); are they low and flood-prone? - Would flooding trigger long downtime (mold remediation, code or insurance requirements)? - Is the facility needed during emergencies (shelter, warming/cooling, distribution)? - Can flooding cut off access or parking even if the building stays dry?	- Sensitivity is high if floodwater can reach the lowest level and damage mechanical/electrical systems, causing extended closure. - Sensitivity increases if the building is intended for emergency community functions or if access roads/parking flood.	- Flooding is treated as a top hazard; loss of access and disruption of services is a recognized impact—important if this facility supports community functions during events.	- Facility would be cut off; access road would be flooded. - Courts would be flooded; higher investment but recoverable. - Has been used as an emergency center; serves as the Town's emergency center but is not licensed as a shelter (cannot host people overnight). - Only public drinking water supply accessible from outdoors (any time of day); residents can access water. Well is at a lower elevation, at risk of flood contamination. - Emergency generator is close to mapped flood areas; propane-fueled, propane tank is underground.	S4	- Are protections in place (backflow preventers, sump pumps, sealed penetrations, deployable barriers)? -Is critical equipment elevated, and are there procedures to move contents quickly? - Is there backup power and a fuel/maintenance plan? - Are there written SOPs for shutdown, protection, and reopening, and have they been practiced? - Are there cleanup/restoration resources and the ability to relocate services temporarily?	- Capacity is good when equipment is elevated, there is backup power, and staff have clear SOPs and resources for rapid protection and cleanup. - Capacity is low when there are no protections, no generator, and recovery depends on limited outside contractor availability.	- County planning/outreach framework can support facility preparedness SOPs and continuity planning; NFIP/FIRM/map use supports understanding exposure. - Limited local resources may constrain building retrofits without outside funding.	- No flood protections for generator or well area. - No standard operating procedures (SOPs) for flood response. - Church across the street is outside the flood zone and serves as a secondary emergency center; has a generator but does not provide an outdoor public water source (kitchen inside).	AC2
Dams	Wayne Village Dam	- What are the main flood-related failure/impact modes (overtopping, spillway capacity exceedance, erosion, outlet/gate malfunction)? - Is the spillway or outlet vulnerable to debris or ice blockage? - What are the downstream consequences if performance is reduced (roads, structures, life-safety risk)? - Could impacts cascade to downstream bridges, culverts, or road crossings? - How quickly do water levels rise, and how little margin exists before impacts occur?	- Sensitivity is high where extreme storms may exceed spillway capacity or debris blocks flow, raising levels and increasing downstream flooding risk. - Consequences are high if reduced performance could cause rapid inundation affecting critical access routes or developed areas.	- Plan notes local water levels are affected by Town-owned dams, making dam performance relevant to upstream/downstream flooding impacts.	- Low scour risk. - Low hazard dam (MEMA). - Limited blockage at flood gates. - Recreational areas upstream; swimming areas. - Cost for repair would be high; loss to property values. - Potential for significant property value impacts.	S3	- Is there a current Emergency Action Plan with roles, contacts, and triggers? - Who can operate controls, and is there reliable access and power during storms? - Are inspections routine, deficiencies tracked, and maintenance adequately funded? - Is there monitoring (staff gauges/instrumentation) and clear action thresholds? - Is pre-storm drawdown feasible/allowed, and are contractors/materials available for rapid stabilization?	- Capacity is strong when an Emergency Action Plan is current, inspections/maintenance are routine, operating authority is clear, and monitoring/response triggers are established. -Capacity is limited when ownership/operations are unclear, access is constrained during storms, or repairs require long permitting and specialized contractors.	- Plan supports participation in dam safety exercises and coordination; County/State partners can assist with planning and response. - Funding/deferral realities may affect ability to implement spillway/outlet upgrades quickly.	- 12-year inspection cycle; last full inspection was in 2020 (condition inspection with no issues). - Town conducts light visual inspections, informal. - Operations and Maintenance Plan in place (September 2003; MBP Consulting). - Dam keeper (volunteer w/ stipend); access to controls is good. Looking to replace wooden flashboards, which are hard to remove. Gate has good, secure access from walkway. - Clear action threshold. - Established procedures for drawdown. - Limited funding for repairs.	AC3
Dams	Lovejoy Pond Dam				- Low scour risk. - Low hazard dam. - Some repairs completed in 2011. - Limited chance for blockage; no gates or flashboard, single concrete spillway. - North Wayne Bridge is immediately downstream. - Recreational swimming area immediately upstream. - Obvious crack in patching of west abutment (river right); MEMA did not find it to be a hazard. - Cost for repair would be high. - Potential for significant property value impacts.	S3				- 12-year inspection cycle; last full inspection was in 2019; condition assessment occurred in 2011. - Town conducts light visual inspections. - No Operations and Maintenance Plan; no boards and no controls. - Limited funding for repairs.	AC2
Ponds&Lakes	Androscoggin Lake	- Do high water and wave action cause shoreline erosion that threatens Town assets (roads, access points, parks)? - Are there low-lying public access areas that become unusable during high water? - Are there water quality concerns from flooding (septic/drainage impacts) with health or regulatory implications? - Do lake levels affect outlets/culverts, contributing to upstream flooding or road impacts?	- Sensitivity is moderate to high where elevated lake levels and waves drive shoreline erosion that undermines public access areas or adjacent roads. - Impacts may include recurring maintenance costs, loss of access, and occasional flooding of low shoreline areas.	- Plan describes basin backwater flooding that raises lake levels and can cut off access; shoreline/low-lying access impacts are consistent with known risk.	- Backwater flooding from the Dead River; significant water quality impacts experienced in 2025. - State- and Town-owned boat launches. - Private summer camp (Camp Androscoggin), a large taxpayer, would be flooded; private Jellystone Campground also at risk. - Residential areas could be cut off; houses near the boat launch were cut off in winter storms '23/'24 (West Acres Road) - Limited impacts to private property overall, but septic systems are present and some are very old.	S2	- Is there routine monitoring of levels and a way to communicate advisories/closures quickly? - Are shoreline stabilization options feasible within permitting constraints? - Are responsibilities shared with partners (lake association), and is funding available for maintenance? - Can the Town repair docks/ramps/access points quickly after damage?	- Capacity is moderate where the Town can monitor conditions, close facilities as needed, and implement permitted erosion controls with partner support. - Capacity is low where stabilization is constrained and repairs are slow due to funding, permitting, or contractor limitations.	- Shoreland ordinance provides baseline protection; advisories/coordination (County EMA/NWS) support warnings and closures.	- New ordinance for septic system inspections in the shoreland zone at time of property transfer; repairs are required when needed. -No routine monitoring of lake levels; no recordkeeping or reporting. -30 Mile River Watershed and Androscoggin Lake Improvement Corporation (ALIC) work on nonpoint source pollution reduction, shoreline stabilization. -Town-owned assets can be repaired relatively quickly. - MaineDEP list of lakes most at risk of algal blooms	AC2
Ponds&Lakes	Pocasset Lake				- Potential for town impacts to Walton Road and its associated culvert, as well as the Lord Road culvert. - Greater impacts to private property; septic systems are present and some are very old. - Low-lying areas could cut off access to private properties. - Minor flood potential along section of Town-owned Pond Road.	S1				- Wetland to the northeast (and along Pickerel Pond) may provide some flood storage (impacts to Lord Road) - New ordinance for septic system inspections in shoreland zone at time of property transfer; repairs are required when needed. - No routine monitoring of lake levels; no recordkeeping or reporting. - 30 Mile River Watershed and Androscoggin Lake Improvement Corporation (ALIC) work on nonpoint source pollution reduction, shoreline stabilization.	AC3
Ponds&Lakes	Dexter Pond				- Potential for town impacts to Mt Pisgah Road culvert (Tempy bridge) which is a critical asset. - Impacts to private property surrounding the pond and any septic systems - Relatively few Town assets, Dexter Pond Road to the north is within Town of Winthrop - Southeast of the pond is adjacent to Kennebec Land Trust conservation land, all forested	S1				-Water quality data has been collected by the Cobbossee Watershed District (CWD) and MDEP since 1995. - New ordinance for septic system inspections in shoreland zone at time of property transfer; repairs are required when needed. - No routine monitoring of lake levels; no recordkeeping or reporting.	AC3
Ponds&Lakes	Berry Pond				- Potential for impacts to Dexter Pond Road, but the culvert and causeway is in the Town of Winthrop - Possible flooding impacts to private Shoat Road on western side of Berry Pond, no Town assets - Flooding impacts to low lying wetlands to the west of the pond	S1				-Water quality data has been collected by the Cobbossee Watershed District (CWD) and MDEP since 1995. Overall water quality is increasing since 2010. - New ordinance for septic system inspections in shoreland zone at time of property transfer; repairs are required when needed. - Water quality data has been collected by the Cobbossee Watershed District (CWD) and MDEP since 1995. Overall water quality is increasing since 2010. - New ordinance for septic system inspections in shoreland zone at time of property transfer; repairs are required when needed. - No routine monitoring of lake levels; no recordkeeping or reporting.	AC3
Ponds&Lakes	Wilson Pond				- Flood impacts to Tempy Bridge (Mount Pisgah Road culvert) between Wilson and Dexter ponds - Potential impacts to private property surrounding the pond - Impacts to private property surrounding the pond and any septic systems - Impacts to forested Kennebec Estuary Land Trust Gott Pasture property	S1				- New ordinance for septic system inspections in shoreland zone at time of property transfer; repairs are required when needed. - Current TMDL for phosphorus	AC1
Ponds&Lakes	Lovejoy Pond				- Potential flooding along shoulder of Lovejoy Pond Road and along private Lonefeather Lane - Impacts to access using the North Wayne Bridge on Walton Road at the Lovejoy Pond Outlet - Potential impacts to the Lovejoy Pond Dam - Impacts to private property surrounding the pond and any septic systems	S2				-30 Mile River Watershed and Lovejoy Pond Improvement Association work on nonpoint source pollution reduction, shoreline stabilization. - New ordinance for septic system inspections in shoreland zone at time of property transfer; repairs are required when needed.	AC3
Roads	Coolidge Road	- Where are the low points and what storm intensity causes overtopping, ponding, or washouts? - Are ditches/culverts undersized or prone to blockage, concentrating runoff onto the road? - Is the road vulnerable to shoulder loss, embankment erosion, or base failure from saturation? - What are the consequences of closure (isolated homes, emergency access, school routes, economic impacts)? - Are there known repetitive-damage segments?	- Sensitivity is high where undersized drainage and low points lead to repeated overtopping and washouts, especially if detours are limited. - Sensitivity is lower where flooding causes short-lived ponding without structural damage and alternative routes exist.	- Plan's municipal project list emphasizes culvert replacement/upsizing, ditching/drainage improvements, and road elevation—confirming common "first failures." - Plan notes flood-related road damage can consume an entire annual road maintenance budget, raising consequence severity.	- 100-year flood includes small area of Coolidge Road. More significant floods would very likely overtop the road. Dead-end road to 40+ private property parcels. - Upstream MaineDOT culvert on Route 133 / Main Street (DOT Lg Culvert #46170) becomes clogged with debris & beaver activity. When MaineDOT removes the blockage, surge of water impacts Coolidge Road & culvert. - Coolidge Road is the only access to Leadbetter Road (Town), West Acres Road (private), and Wood Road (private), some of which were severly flooded in winter storms '23/'24	S3	- How fast can Public Works implement barricades, signage, detours, and public notification? - Are ditching/culvert cleaning routines established, and are trouble spots mapped? - Are equipment/materials available (gravel, riprap, excavator), and can contractors mobilize quickly? - Are detours workable under night/winter conditions? - Is there readiness/funding to implement permanent fixes (upsizing drainage, raising road, stabilizing slopes)?	- How fast can Public Works implement barricades, signage, detours, and public notification? - Are ditching/culvert cleaning routines established, and are trouble spots mapped? -Are equipment/materials available (gravel, riprap, excavator), and can contractors mobilize quickly? -Are detours workable under night/winter conditions? - Is there readiness/funding to implement permanent fixes (upsizing drainage, raising road, stabilizing slopes)?	- County EMA/KVCOG can support grant applications and technical planning; MaineDOT standards and NFIP/FIRM tools guide upgrades. - Many projects deferred due to lack of funds—strong indicator that long-term upgrades depend on external funding cycles.	- No detour routes - Town does not have reserve funding to repair/replace, rely on MEMA/FEMA for emergency repairs	AC1
Roads	Gott Road				- 100-year flood zone includes considerable portion of Gott Road near Ladd Rec Center - Dead-end road to 20+ private property parcels	S3				- No detour routes - Town does not have reserve funding to repair/replace, rely on MEMA/FEMA for emergency repairs	AC1
Roads	Mount Pisgah Road				- Major commuter route to Route 202, but there are available detours - 100-year flood appears to be at road shoulders (at Tempy Bridge), more extreme events would likely start overtopping at each approach (road is higher at the culvert than the approaches)	S3				- There are detour routes available. - Not a MaineDOT road or culvert; costs would fall to the Town - Town does not have reserve funding to repair/replace, rely on MEMA/FEMA for emergency repairs	AC2
Roads	North Wayne Road				- Floodplain appears to be close to road at the culvert just north of intersection with White Road, but doesn't overtop road - Major commuter route to Route 17 - Documented shoulder washouts in several locations from December 2023 (FEMA Declaration 2024-02-27)	S1				- Road grade appears to be mostly out of the floodplain - Detour routes available - Close to Town Office & Fire Station, Town could close road & establish detour quickly if flooded - Town does not have reserve funding to repair/replace, rely on MEMA/FEMA for emergency repairs	AC2
Roads	Old Winthrop Road				- 100-year flood reaches road shoulders north of intersection with Gott Road, possible inundation with larger events in this location. Flood zone A at two Town-owned culverts near intersections of House Rd and Fairbanks Rd - MaineDOT bridge #6367 (Town-owned) constructed 1970, culvert rating of moderate to major deterioration - Documented shoulder washout from severe storms in the vicinity of MaineDOT bridge #6367 from April/May 2023 (FEMA Declaration 2023-07-06) - Commuter traffic to Route 202 in Winthrop/Monmouth	S3				- Town could close road and establish detour relatively quickly - Detour routes available - No reserve funding for emergency repair/replacement, would rely on MEMA/FEMA	AC2
Roads	Walton Road				- Relatively removed from the floodplain besides exposure to the east of intersection with Pond Road, where floodplain reaches road shoulders at a culvert - Detours available	S1				- Town could close road and establish detour relatively quickly - Town does not have reserve funding to repair/replace, rely on MEMA/FEMA for emergency repairs	AC2
Roads	Main Street (Route 133)				- Several potential low points through Wayne village, including at the bridge under extreme (>100-year) events, near F&W boat launch, and at Muddy Pond culvert between intersections with Coolidge Rd & Pond Rd (Zone AE & Zone A) - Major state route, detours available but only on local roads	S2				- State route (Rt. 133) owned and maintained by MaineDOT - DOT would be responsible for emergency closures and repairs	AC3
Roads	Leadbetter Road				- Relatively little direct flood exposure to Leadbetter Road (most flood exposure is at Coolidge Road) - Only route to private West Acres Rd, Wood Rd, and private Camp Androscoggin summer camp	S1				- No detours available, dead end road - Town does not have reserve funding to repair/replace, rely on MEMA/FEMA for emergency repairs	AC1
Roads	Lovejoy Pond Road				- Flood exposure at western shore of Lovejoy Pond, although flood zones do not show road overtopping - Major commuter route to/from Route 17 in Fayette - Documented history of shoulder washout from December 2023 (FEMA Declaration 2024-02-27)	S2				- Town road; detours available through Readfield - Town does not have reserve funding to repair/replace, rely on MEMA/FEMA for emergency repairs	AC2
Roads	Pond Road				- Flood exposure at Hale's Brook (Zone A floodzone, no flood elevations set), and some exposure where Pond Road is immediately adjacent to western shore of Pocasset Lake - Town-owned bridge on Pond Road at Hale's Brook (MaineDOT Bridge #5550) constructed 1954, latest bridge rating states moderate to major deterioration. 1954 bridge plans state "water over road in 1936"	S3				- There are detour routes available - Not a MaineDOT road or culvert; costs would fall to the Town - Town does not have reserve funding to repair/replace, rely on MEMA/FEMA for emergency repairs	AC2
Stormwater drainage infr	Lord Rd Culvert (44.351939, -70.050037)	- Is the culvert likely undersized for current rainfall, causing upstream flooding and road overtopping? - Does it frequently plug with debris/ice, and do inlet/outlet conditions show erosion? - If it fails, does it create a road washout or flood nearby properties? - Is the culvert affected by backwater from a pond/stream/outlet?	- Sensitivity is high when an undersized or blockage-prone culvert can cause rapid overtopping and washout, cutting an important road. - Sensitivity increases where backwater reduces capacity and flooding affects nearby structures or critical routes.		- Potential for inundation at events larger that 100-year storm - This section of road is Town-owned, but leads to private roads with no other outlet - Would strand ~50 residents if the culvert is compromised or impassible - Possible routine blockage from beaver activity	S2	- Is the site accessible for inspection and clearing, and is there a defined pre-storm maintenance schedule? - Are protective features present and maintained (headwalls, trash racks, riprap/armoring)? - How feasible is replacement/upsizing (right of-way constraints, permitting, cost), and is it in a capital plan? - Can temporary measures be deployed quickly (clearing, bypass, emergency armoring)?	- Capacity is higher where the culvert is easy to access, routinely maintained, and has a clear, feasible path to upsizing/replacement. - Capacity is lower where access is difficult, constraints limit upgrades, and repeated failures occur without a funded solution.		- No detour routes - Beaver exclusion fencing installed at inlet to reduce blockage - Town-owned culvert, no DOT support - Town does not have reserve funding to repair/replace, rely on MEMA/FEMA for emergency repairs	AC1
Stormwater drainage infr	North Wayne Rd Culvert near Cemetery (44.370673, -70.030220)				- Documented culvert washout December 2023 (FEMA Declaration 2024-02-27); reused 20'x18" culvert - Passes stream channel, deep culvert - Road appeared to have a sink hole & has overtopped - Drains wetland, impacted by beavers	S2				-Town would rely on MEMA/FEMA for emergency replacement - Approx. 7 feet of fill, considerable excavation	AC2
Stormwater drainage infr	North Wayne Rd Culvert north of White Road (44.373301, -70.033243)				- Passes stream channel - Floodplain extends up to culvert outlet	S2				- Approx. 6 feet of fill - Town does not have emergency funds to replace	AC2
Stormwater drainage infr	Walton Rd Culvert (44.377548, -70.064553)				- History of blockage from debris and spring ice jams - Road has overtopped - Major route between schools	S3				- Large 48" culvert on major route, would require traffic impacts/detours to replace - Town does not have emergency funds to replace	AC1
Stormwater drainage infr	Coolidge Rd Culvert (44.355589, -70.081321)				- New homes have been built in this area. - Potential to cut off residents if the culvert is compromised or flooded. - Possible sizing issue; flooding would be problematic but could be mitigated by upstream corrections performed by the State.	S3					AC1

E

FEMA Flood Insurance Rate Maps (FIRMs)

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 19N. The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from Main GIS. Base map files were provided in digital form by the Office of Maine GIS.Orthophoto images were produced at a scale of 1:2,400 and 1:4,800 dated spring of 2003 to spring of 2005.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

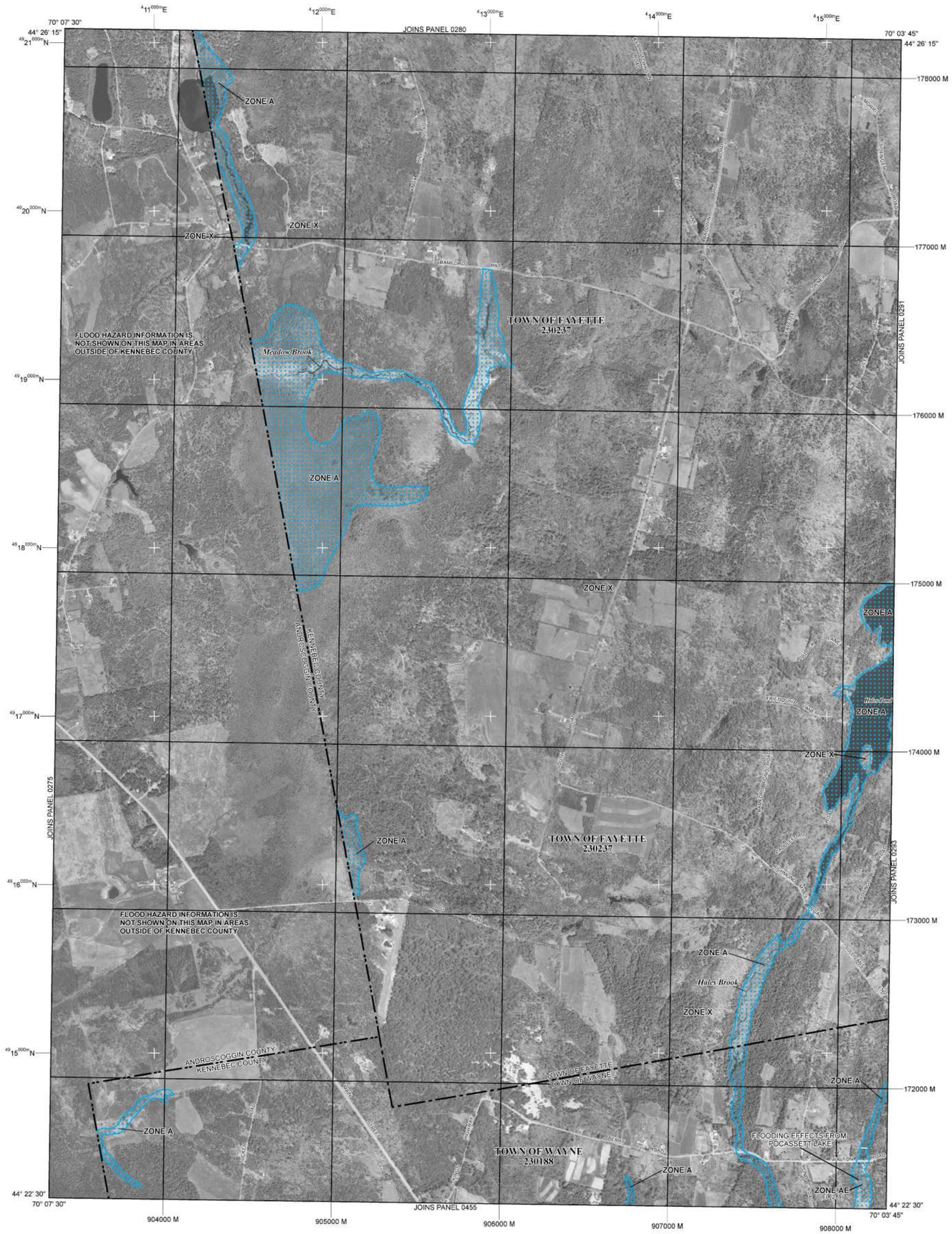
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map**, how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

State of Maine Floodway Note: Under the Maine Revised Statutes Annotated (M.R.S.A.) Title 38 § 439-A, 7C where the floodway is not designated on the Flood Insurance Rate Map, the floodway is considered to be the channel of a river or other water course and the adjacent land areas to a distance of one-half the width of the floodplain, as measured from the normal high water mark to the upland limit of the floodplain, unless a technical evaluation certified by a registered professional engineer is provided demonstrating the actual floodway based upon approved FEMA modeling methods.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

- A — A — Cross section line
- 23 — 23 — Transect line
- Culvert
- Bridge
- 45° 02' 08", 93° 02' 12" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
- 4989000 M — 1000-meter ticks: Maine State Plane West Zone (FIPS Zone 1802), Transverse Mercator projection
- 4989000m N — 1000-meter Universal Transverse Mercator grid values, zone 19N
- DX5510 × — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 • — River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
June 16, 2011

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET
300 0 300 600 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0290D

FIRM

FLOOD INSURANCE RATE MAP

KENNEBEC COUNTY, MAINE
(ALL JURISDICTIONS)

PANEL 290 OF 775
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
FAYETTE, TOWN OF	230237	0290	D
WAYNE, TOWN OF	230188	0290	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
23011C0290D
EFFECTIVE DATE
JUNE 16, 2011

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 19N. The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from Main GIS. Base map files were provided in digital form by the Office of Maine GIS.Orthophoto images were produced at a scale of 1:2,400 and 1:4,800 dated spring of 2003 to spring of 2005.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

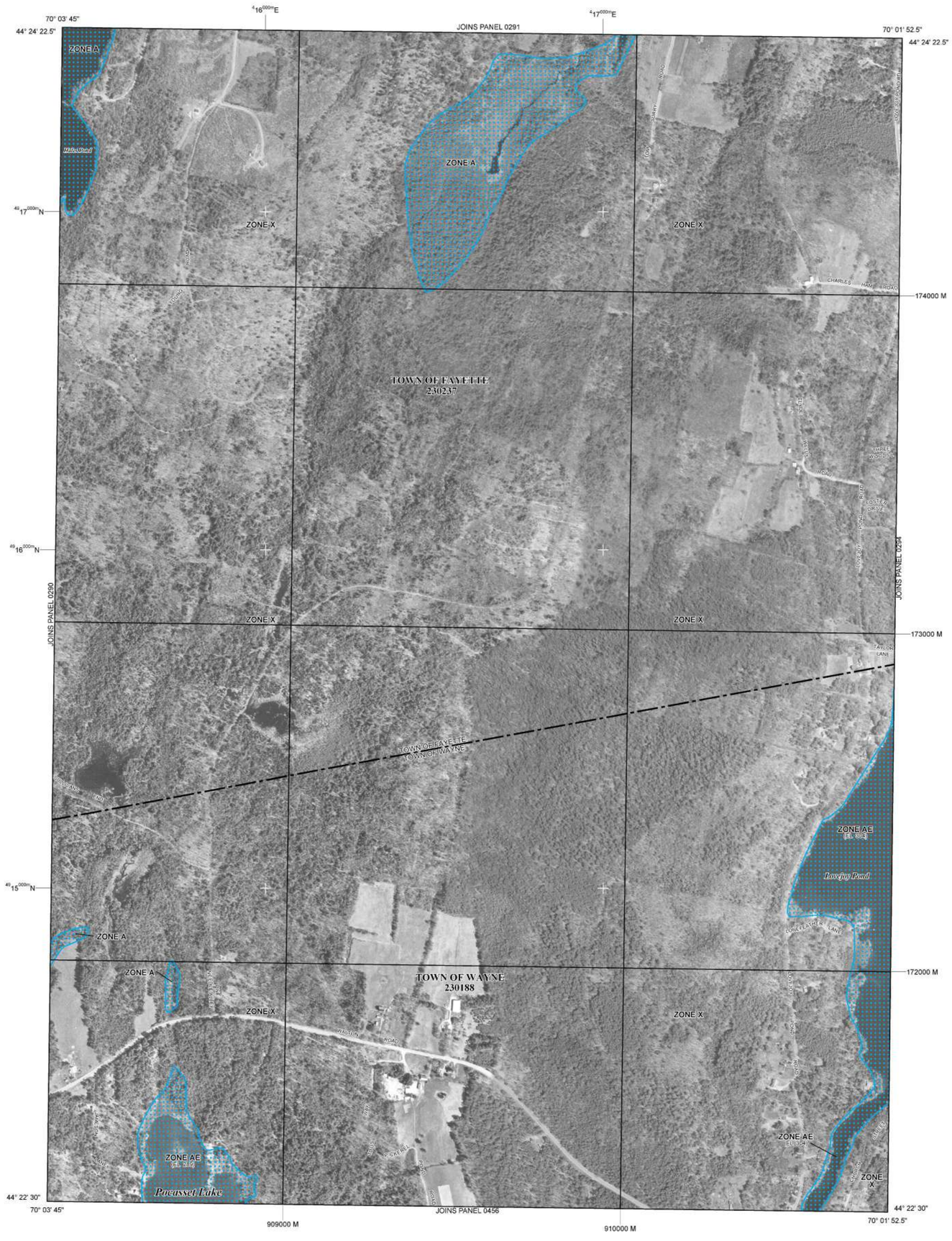
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map,** how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

State of Maine Floodway Note: Under the Maine Revised Statutes Annotated (M.R.S.A.) Title 38 § 439-A, 7C where the floodway is not designated on the Flood Insurance Rate Map, the floodway is considered to be the channel of a river or other water course and the adjacent land areas to a distance of one-half the width of the floodplain, as measured from the normal high water mark to the upland limit of the floodplain, unless a technical evaluation certified by a registered professional engineer is provided demonstrating the actual floodway based upon approved FEMA modeling methods.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

- A — A — Cross section line
- 23 — 23 — Transect line
- Culvert
- Bridge
- 45° 02' 08", 93° 02' 12" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
- 4989000 M — 1000-meter ticks: Maine State Plane West Zone (FIPS Zone 1802), Transverse Mercator projection
- 4989000mN — 1000-meter Universal Transverse Mercator grid values, zone 19N
- DX5510 × — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 • — River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
June 16, 2011

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET
150 0 150 300 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0293D

FIRM

FLOOD INSURANCE RATE MAP

KENNEBEC COUNTY, MAINE
(ALL JURISDICTIONS)

PANEL 293 OF 775
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
FAYETTE, TOWN OF	230237	0293	D
WAYNE, TOWN OF	230188	0293	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
23011C0293D
EFFECTIVE DATE
JUNE 16, 2011

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 19N. The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from Main GIS. Base map files were provided in digital form by the Office of Maine GIS.Orthophoto images were produced at a scale of 1:2,400 and 1:4,800 dated spring of 2003 to spring of 2005.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map,** how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

State of Maine Floodway Note: Under the Maine Revised Statutes Annotated (M.R.S.A.) Title 38 § 439-A, 7C where the floodway is not designated on the Flood Insurance Rate Map, the floodway is considered to be the channel of a river or other water course and the adjacent land areas to a distance of one-half the width of the floodplain, as measured from the normal high water mark to the upland limit of the floodplain, unless a technical evaluation certified by a registered professional engineer is provided demonstrating the actual floodway based upon approved FEMA modeling methods.

LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

- Cross section line
- Transect line
- Culvert
- Bridge
- 45° 02' 08", 93° 02' 12" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
- 4989000 M — 1000-meter ticks: Maine State Plane West Zone (FIPS Zone 1802), Transverse Mercator projection
- 4989000mN — 1000-meter Universal Transverse Mercator grid values, zone 19N
- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 — River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
June 16, 2011

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET
150 0 150 300 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0294D

FIRM

FLOOD INSURANCE RATE MAP

KENNEBEC COUNTY, MAINE
(ALL JURISDICTIONS)

PANEL 294 OF 775
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
FAYETTE, TOWN OF	230237	0294	D
READFIELD, TOWN OF	230245	0294	D
WAYNE, TOWN OF	230188	0294	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
23011C0294D
EFFECTIVE DATE
JUNE 16, 2011

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 19N. The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from Main GIS. Base map files were provided in digital form by the Office of Maine GIS.Orthophoto images were produced at a scale of 1:2,400 and 1:4,800 dated spring of 2003 to spring of 2005.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

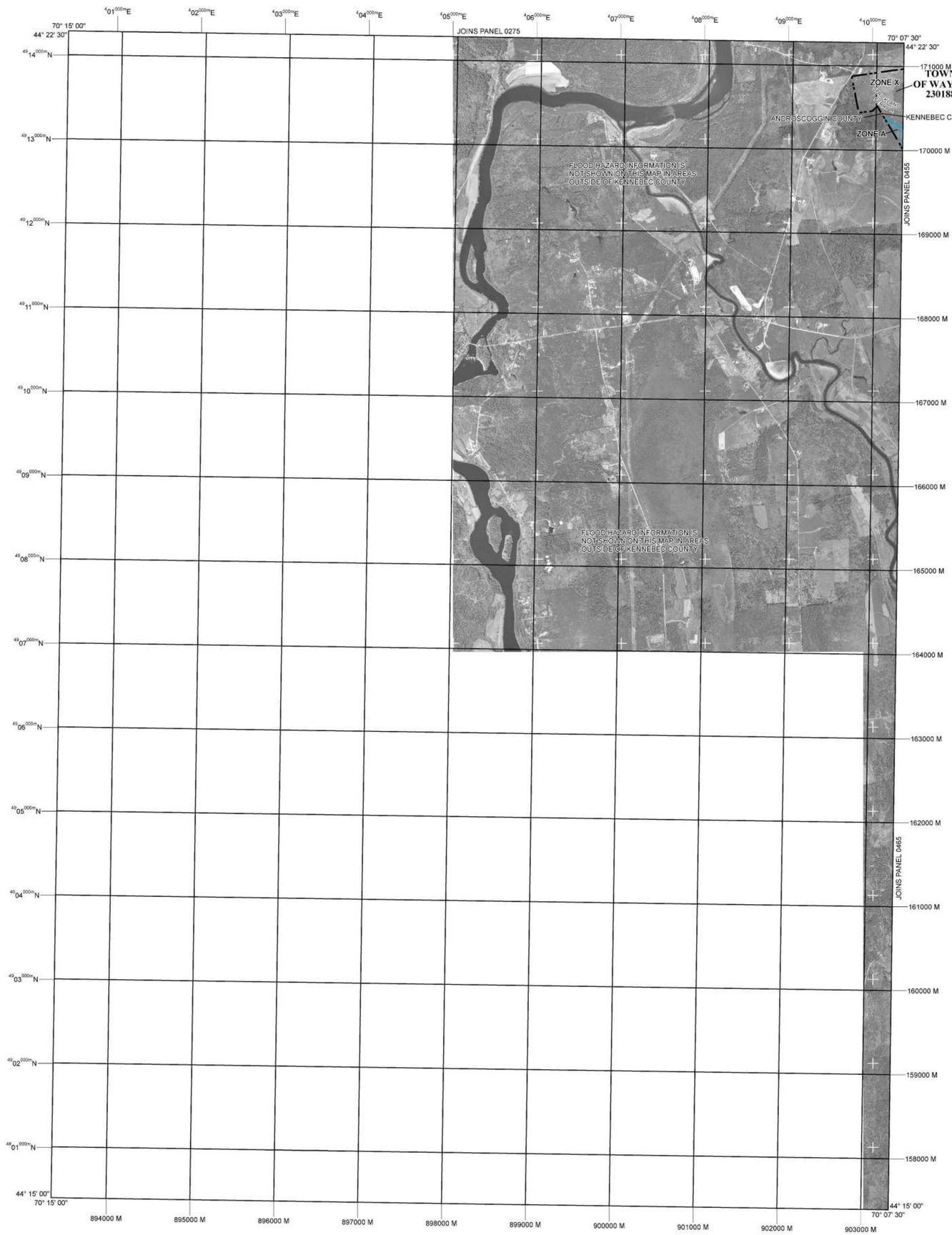
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map,** how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

State of Maine Floodway Note: Under the Maine Revised Statutes Annotated (M.R.S.A.) Title 38 § 439-A, 7C where the floodway is not designated on the Flood Insurance Rate Map, the floodway is considered to be the channel of a river or other water course and the adjacent land areas to a distance of one-half the width of the floodplain, as measured from the normal high water mark to the upland limit of the floodplain, unless a technical evaluation certified by a registered professional engineer is provided demonstrating the actual floodway based upon approved FEMA modeling methods.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	1% Annual Chance Floodplain Boundary
	0.2% Annual Chance Floodplain Boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

A — A	Cross section line
23 — 23	Transect line
	Culvert
	Bridge
45° 02' 08", 93° 02' 12"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
4989000 M	1000-meter ticks: Maine State Plane West Zone (FIPS Zone 1802), Transverse Mercator projection
4989000mN	1000-meter Universal Transverse Mercator grid values, zone 19N
DX5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
M1.5	River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
June 16, 2011

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 2000'

1000 0 2000 4000 FEET
600 0 600 1200 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0450D

FIRM

FLOOD INSURANCE RATE MAP

KENNEBEC COUNTY, MAINE
(ALL JURISDICTIONS)

PANEL 450 OF 775
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
WAYNE, TOWN OF	230188	0450	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
23011C0450D
EFFECTIVE DATE
JUNE 16, 2011

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 19N. The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from Main GIS. Base map files were provided in digital form by the Office of Maine GIS.Orthophoto images were produced at a scale of 1:2,400 and 1:4,800 dated spring of 2003 to spring of 2005.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

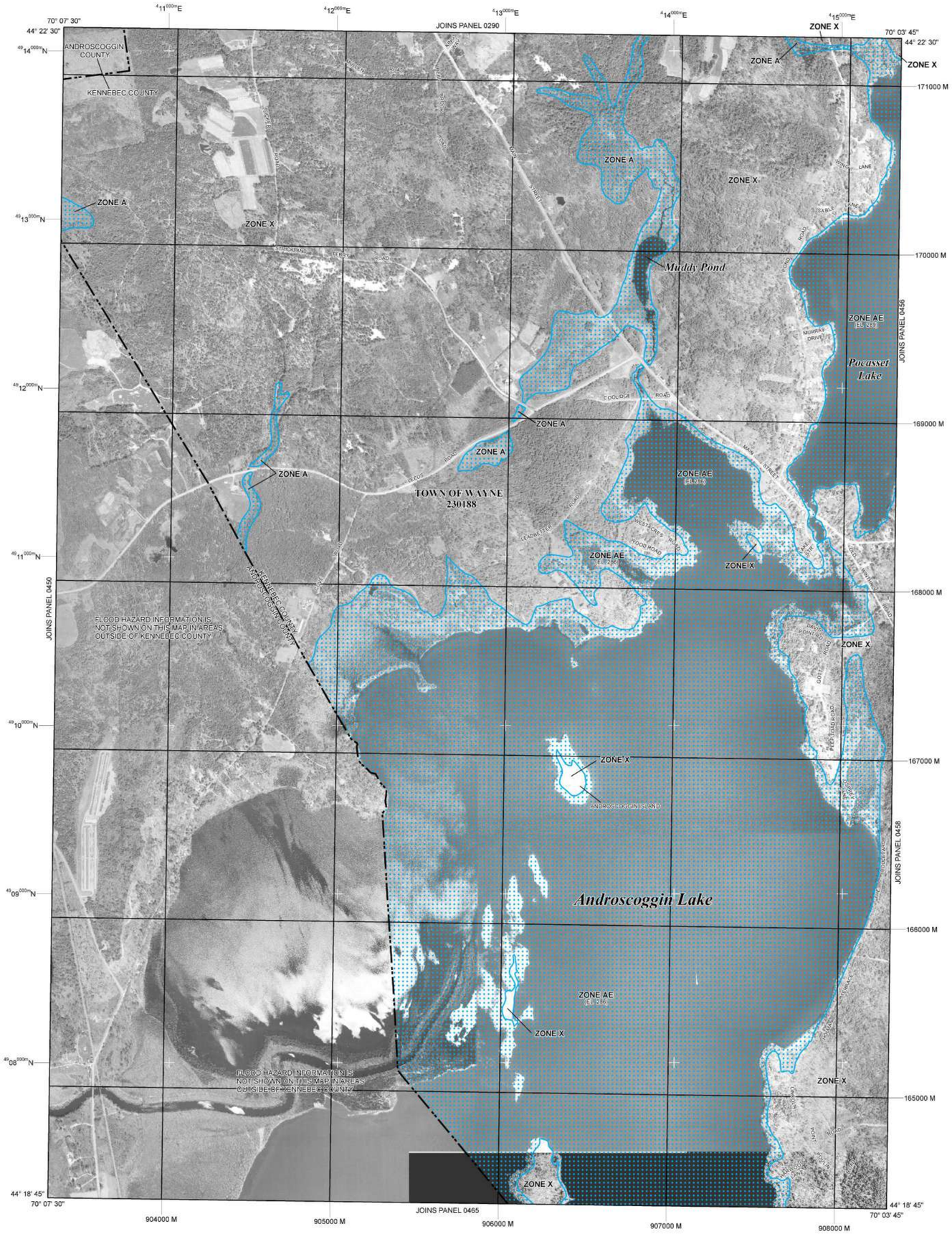
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map,** how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

State of Maine Floodway Note: Under the Maine Revised Statutes Annotated (M.R.S.A.) Title 38 § 439-A, 7C where the floodway is not designated on the Flood Insurance Rate Map, the floodway is considered to be the channel of a river or other water course and the adjacent land areas to a distance of one-half the width of the floodplain, as measured from the normal high water mark to the upland limit of the floodplain, unless a technical evaluation certified by a registered professional engineer is provided demonstrating the actual floodway based upon approved FEMA modeling methods.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

- A — A — Cross section line
- 23 — 23 — Transect line
- Culvert
- Bridge
- 45° 02' 08", 93° 02' 12" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
- 4989000 M — 1000-meter ticks: Maine State Plane West Zone (FIPS Zone 1802), Transverse Mercator projection
- 4988000m N — 1000-meter Universal Transverse Mercator grid values, zone 19N
- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 — River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
June 16, 2011

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET
300 0 300 600 METERS

NFIP NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0455D

FIRM

FLOOD INSURANCE RATE MAP

KENNEBEC COUNTY, MAINE
(ALL JURISDICTIONS)

PANEL 455 OF 775
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
WAYNE, TOWN OF	230188	0455	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
23011C0455D
EFFECTIVE DATE
JUNE 16, 2011

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 19N. The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from Main GIS. Base map files were provided in digital form by the Office of Maine GIS.Orthophoto images were produced at a scale of 1:2,400 and 1:4,800 dated spring of 2003 to spring of 2005.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

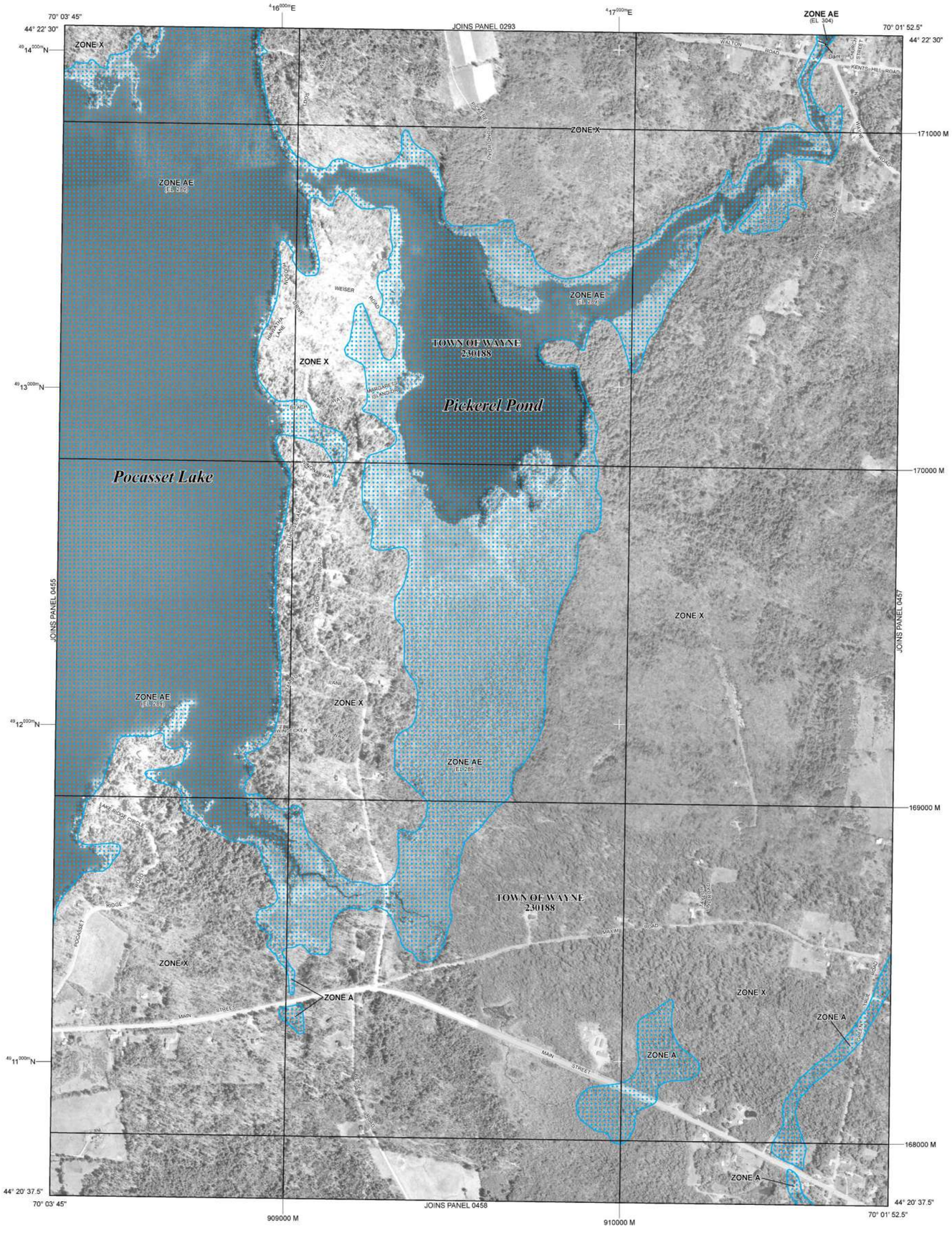
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map,** how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

State of Maine Floodway Note: Under the Maine Revised Statutes Annotated (M.R.S.A.) Title 38 § 439-A, 7C where the floodway is not designated on the Flood Insurance Rate Map, the floodway is considered to be the channel of a river or other water course and the adjacent land areas to a distance of one-half the width of the floodplain, as measured from the normal high water mark to the upland limit of the floodplain, unless a technical evaluation certified by a registered professional engineer is provided demonstrating the actual floodway based upon approved FEMA modeling methods.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

- A — A — Cross section line
- 23 — 23 — Transect line
- Culvert
- Bridge
- 45° 02' 08", 93° 02' 12" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
- 4989000 M — 1000-meter ticks: Maine State Plane West Zone (FIPS Zone 1802), Transverse Mercator projection
- 4989000mN — 1000-meter Universal Transverse Mercator grid values, zone 19N
- DX5510 × — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 • — River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
June 16, 2011

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET
150 0 150 300 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0456D

FIRM

FLOOD INSURANCE RATE MAP

KENNEBEC COUNTY, MAINE
(ALL JURISDICTIONS)

PANEL 456 OF 775
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
WAYNE, TOWN OF	230188	0456	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
23011C0456D
EFFECTIVE DATE
JUNE 16, 2011

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 19N. The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from Main GIS. Base map files were provided in digital form by the Office of Maine GIS.Orthophoto images were produced at a scale of 1:2,400 and 1:4,800 dated spring of 2003 to spring of 2005.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

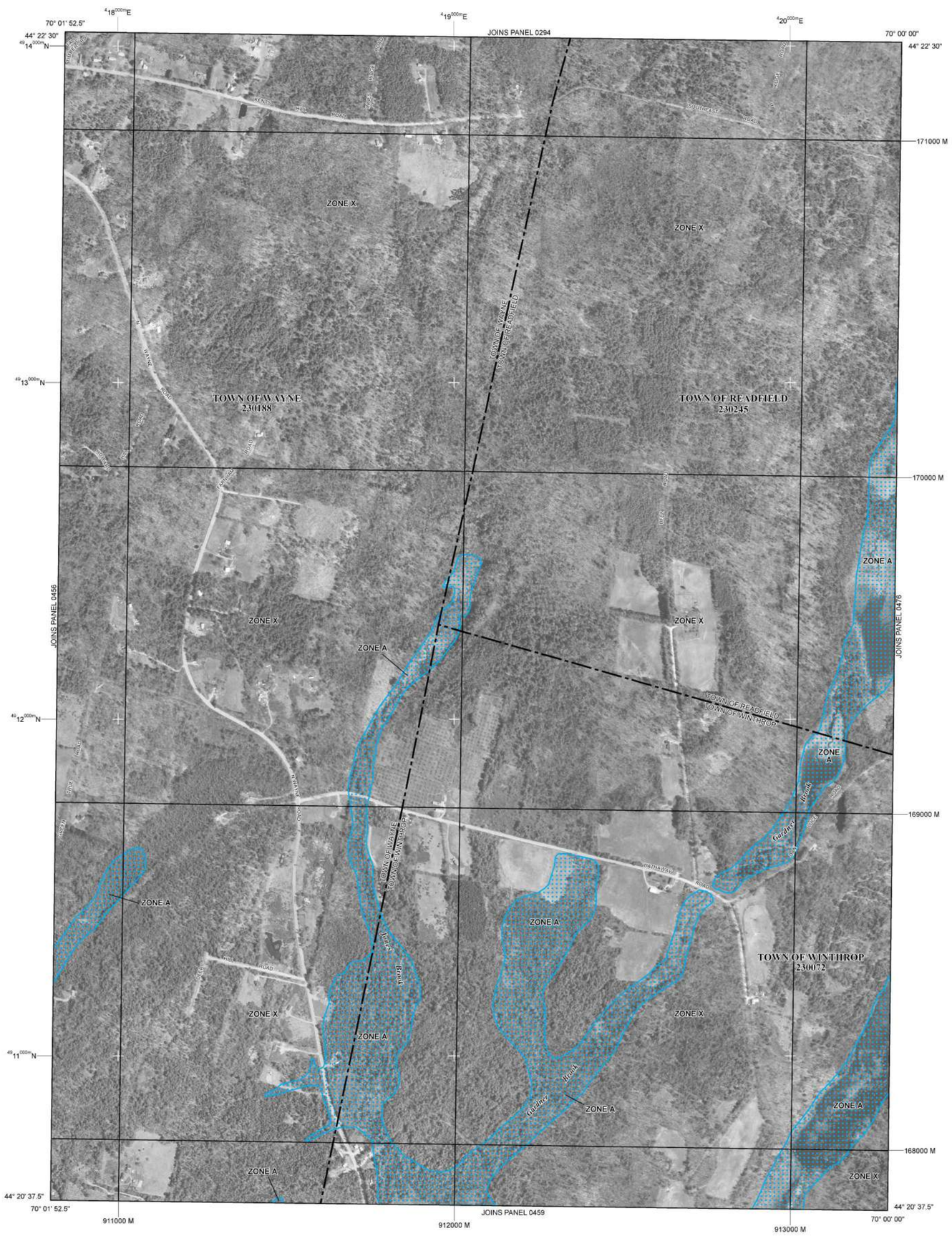
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map,** how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

State of Maine Floodway Note: Under the Maine Revised Statutes Annotated (M.R.S.A.) Title 38 § 439-A, 7C where the floodway is not designated on the Flood Insurance Rate Map, the floodway is considered to be the channel of a river or other water course and the adjacent land areas to a distance of one-half the width of the floodplain, as measured from the normal high water mark to the upland limit of the floodplain, unless a technical evaluation certified by a registered professional engineer is provided demonstrating the actual floodway based upon approved FEMA modeling methods.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	1% Annual Chance Floodplain Boundary
	0.2% Annual Chance Floodplain Boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

A — A	Cross section line
23 — 23	Transect line
	Culvert
	Bridge
45° 02' 08", 93° 02' 12"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
4989000 M	1000-meter ticks: Maine State Plane West Zone (FIPS Zone 1802), Transverse Mercator projection
$^{49}89^{000m}$N	1000-meter Universal Transverse Mercator grid values, zone 19N
DX5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
M1.5	River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
June 16, 2011

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET
150 0 150 300 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0457D

FIRM

FLOOD INSURANCE RATE MAP

KENNEBEC COUNTY, MAINE
(ALL JURISDICTIONS)

PANEL 457 OF 775
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
READFIELD, TOWN OF	230245	0457	D
WAYNE, TOWN OF	230188	0457	D
WINTHROP, TOWN OF	230072	0457	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
23011C0457D
EFFECTIVE DATE
JUNE 16, 2011

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 19N. The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from Main GIS. Base map files were provided in digital form by the Office of Maine GIS.Orthophoto images were produced at a scale of 1:2,400 and 1:4,800 dated spring of 2003 to spring of 2005.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

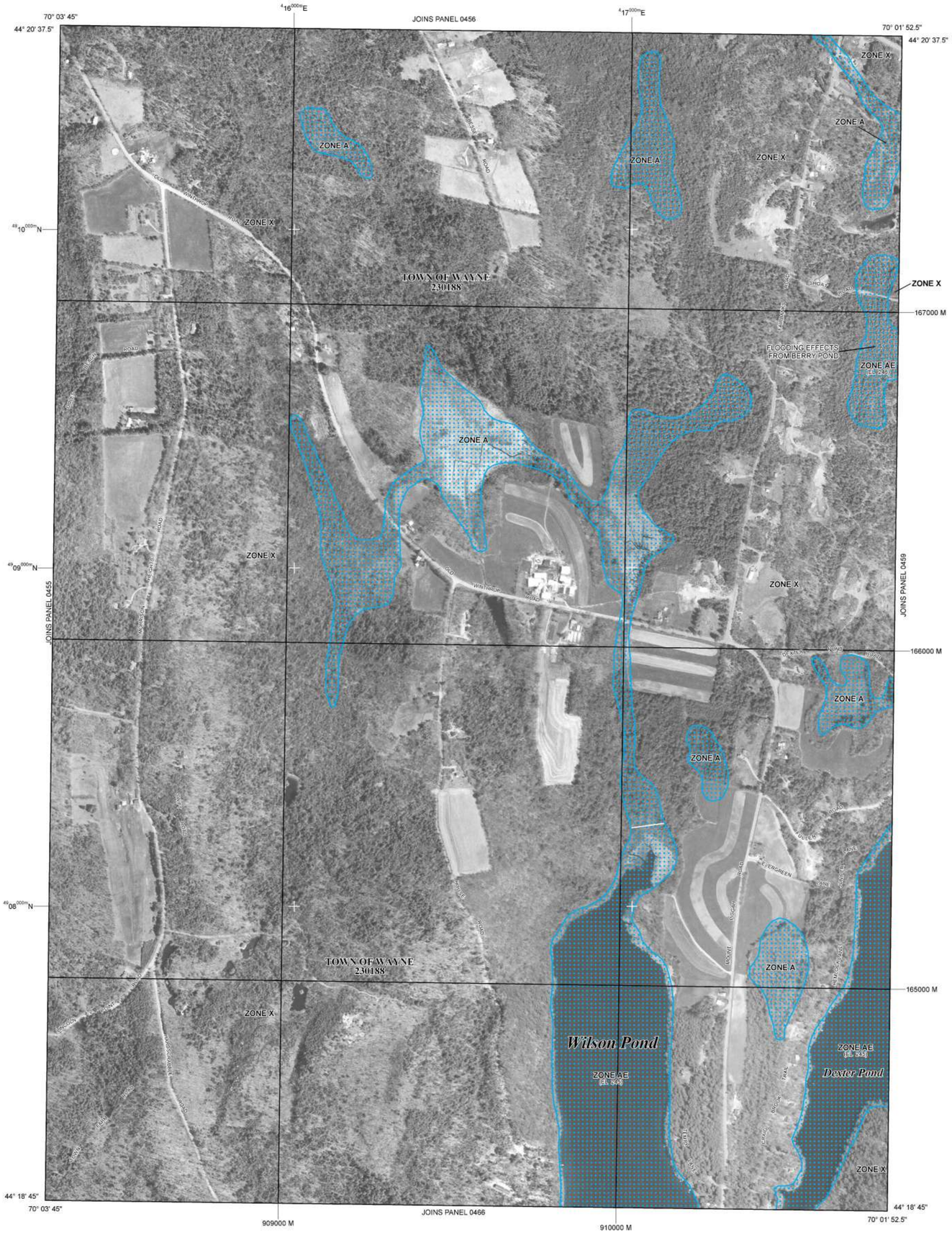
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map,** how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

State of Maine Floodway Note: Under the Maine Revised Statutes Annotated (M.R.S.A.) Title 38 § 439-A, 7C where the floodway is not designated on the Flood Insurance Rate Map, the floodway is considered to be the channel of a river or other water course and the adjacent land areas to a distance of one-half the width of the floodplain, as measured from the normal high water mark to the upland limit of the floodplain, unless a technical evaluation certified by a registered professional engineer is provided demonstrating the actual floodway based upon approved FEMA modeling methods.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	1% Annual Chance Floodplain Boundary
	0.2% Annual Chance Floodplain Boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

A — A	Cross section line
23 — 23	Transect line
	Culvert
	Bridge
45° 02' 08", 93° 02' 12"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
4989000 M	1000-meter ticks: Maine State Plane West Zone (FIPS Zone 1802), Transverse Mercator projection
4 488 000m N	1000-meter Universal Transverse Mercator grid values, zone 19N
DX5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
M1.5	River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
June 16, 2011

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET
150 0 150 300 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0458D

FIRM

FLOOD INSURANCE RATE MAP

KENNEBEC COUNTY, MAINE
(ALL JURISDICTIONS)

PANEL 458 OF 775
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
WAYNE, TOWN OF	230188	0458	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
23011C0458D
EFFECTIVE DATE
JUNE 16, 2011

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 19N. The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from Main GIS. Base map files were provided in digital form by the Office of Maine GIS.Orthophoto images were produced at a scale of 1:2,400 and 1:4,800 dated spring of 2003 to spring of 2005.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

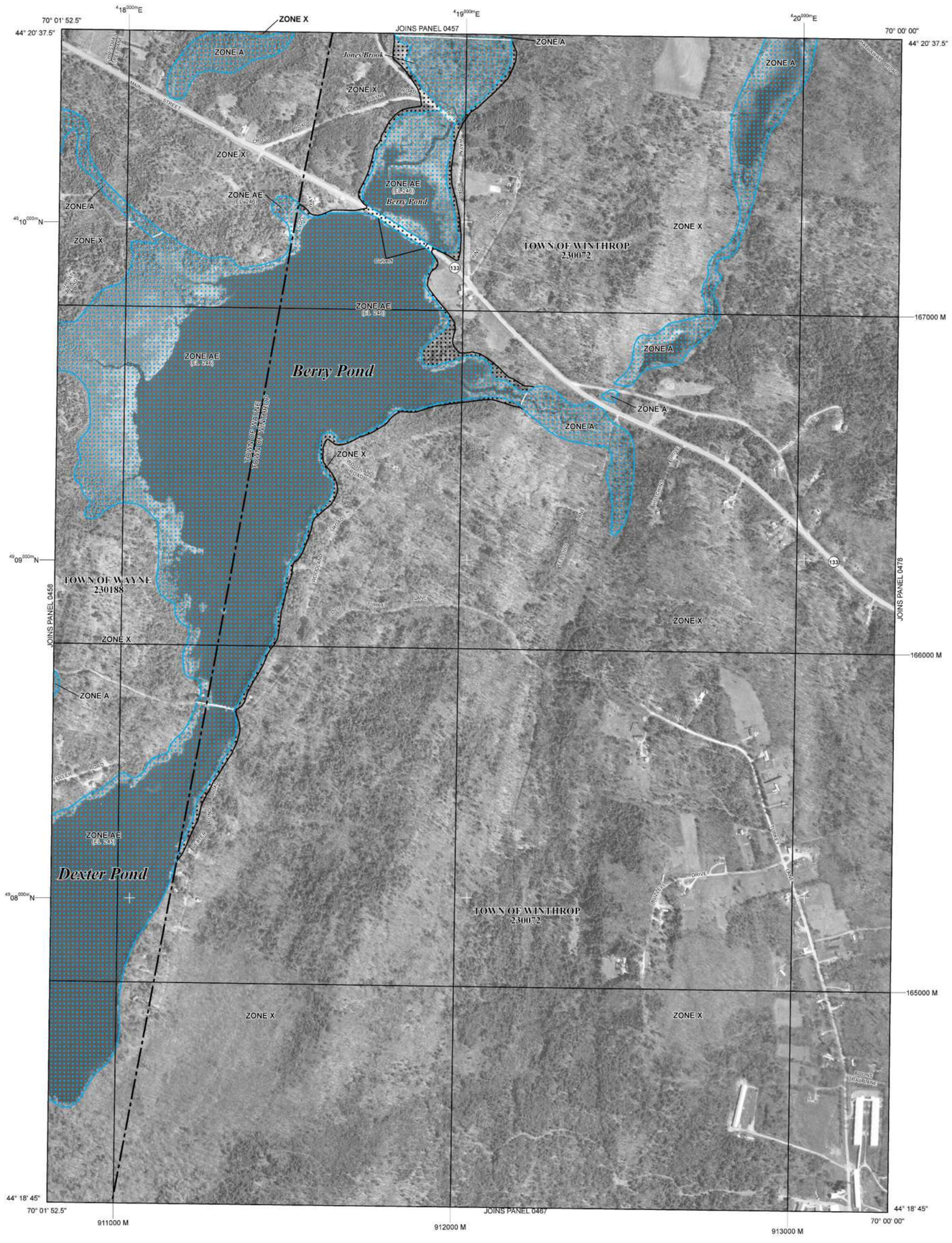
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map,** how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

State of Maine Floodway Note: Under the Maine Revised Statutes Annotated (M.R.S.A.) Title 38 § 439-A, 7C where the floodway is not designated on the Flood Insurance Rate Map, the floodway is considered to be the channel of a river or other water course and the adjacent land areas to a distance of one-half the width of the floodplain, as measured from the normal high water mark to the upland limit of the floodplain, unless a technical evaluation certified by a registered professional engineer is provided demonstrating the actual floodway based upon approved FEMA modeling methods.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

- Cross section line
- Transect line
- Culvert
- Bridge
- 45° 02' 08", 93° 02' 12" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
- 4989000 M — 1000-meter ticks: Maine State Plane West Zone (FIPS Zone 1802), Transverse Mercator projection
- 4989000mN — 1000-meter Universal Transverse Mercator grid values, zone 19N
- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 — River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
June 16, 2011

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET
150 0 150 300 METERS

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0459D

FIRM

FLOOD INSURANCE RATE MAP

KENNEBEC COUNTY, MAINE
(ALL JURISDICTIONS)

PANEL 459 OF 775
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
WAYNE, TOWN OF	230188	0459	D
WINTHROP, TOWN OF	230072	0459	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
23011C0459D
EFFECTIVE DATE
JUNE 16, 2011

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 19N. The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from Main GIS. Base map files were provided in digital form by the Office of Maine GIS.Orthophoto images were produced at a scale of 1:2,400 and 1:4,800 dated spring of 2003 to spring of 2005.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

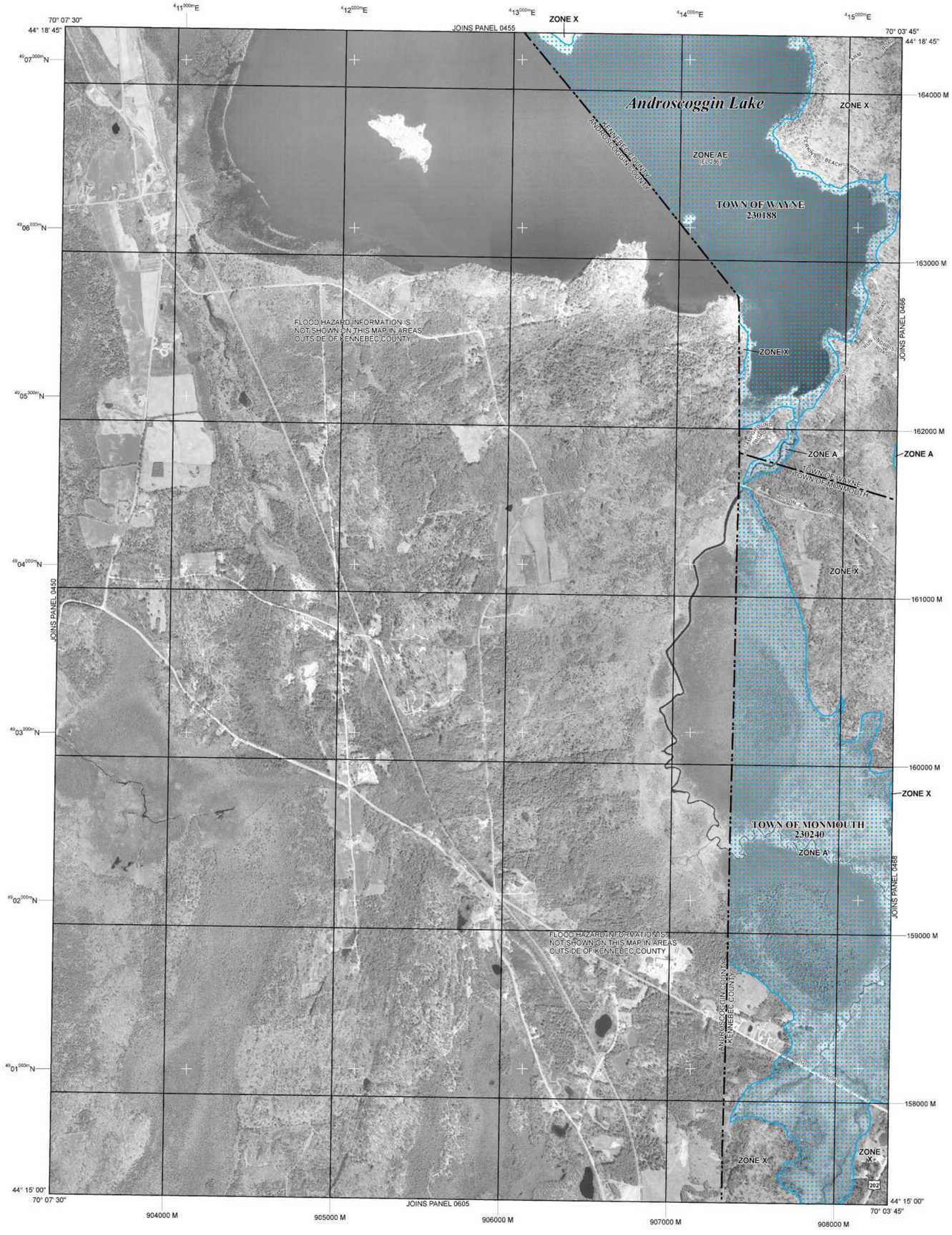
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map,** how to order products, or the National Flood Insurance Program in general, **please** call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

State of Maine Floodway Note: Under the Maine Revised Statutes Annotated (M.R.S.A.) Title 38 § 439-A, 7C where the floodway is not designated on the Flood Insurance Rate Map, the floodway is considered to be the channel of a river or other water course and the adjacent land areas to a distance of one-half the width of the floodplain, as measured from the normal high water mark to the upland limit of the floodplain, unless a technical evaluation certified by a registered professional engineer is provided demonstrating the actual floodway based upon approved FEMA modeling methods.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

- A — A — Cross section line
- 23 — 23 — Transect line
- Culvert
- Bridge
- 45° 02' 08", 93° 02' 12" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
- 4989000 M — 1000-meter ticks: Maine State Plane West Zone (FIPS Zone 1802), Transverse Mercator projection
- 4988000mN — 1000-meter Universal Transverse Mercator grid values, zone 19N
- DX5510 × — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 • — River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
June 16, 2011

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET
300 0 300 600 METERS

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0465D

FIRM

FLOOD INSURANCE RATE MAP

KENNEBEC COUNTY, MAINE
(ALL JURISDICTIONS)

PANEL 465 OF 775
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MONMOUTH, TOWN OF	230240	0465	D
WAYNE, TOWN OF	230188	0465	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
23011C0465D

EFFECTIVE DATE
JUNE 16, 2011

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 19N. The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from Main GIS. Base map files were provided in digital form by the Office of Maine GIS.Orthophoto images were produced at a scale of 1:2,400 and 1:4,800 dated spring of 2003 to spring of 2005.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

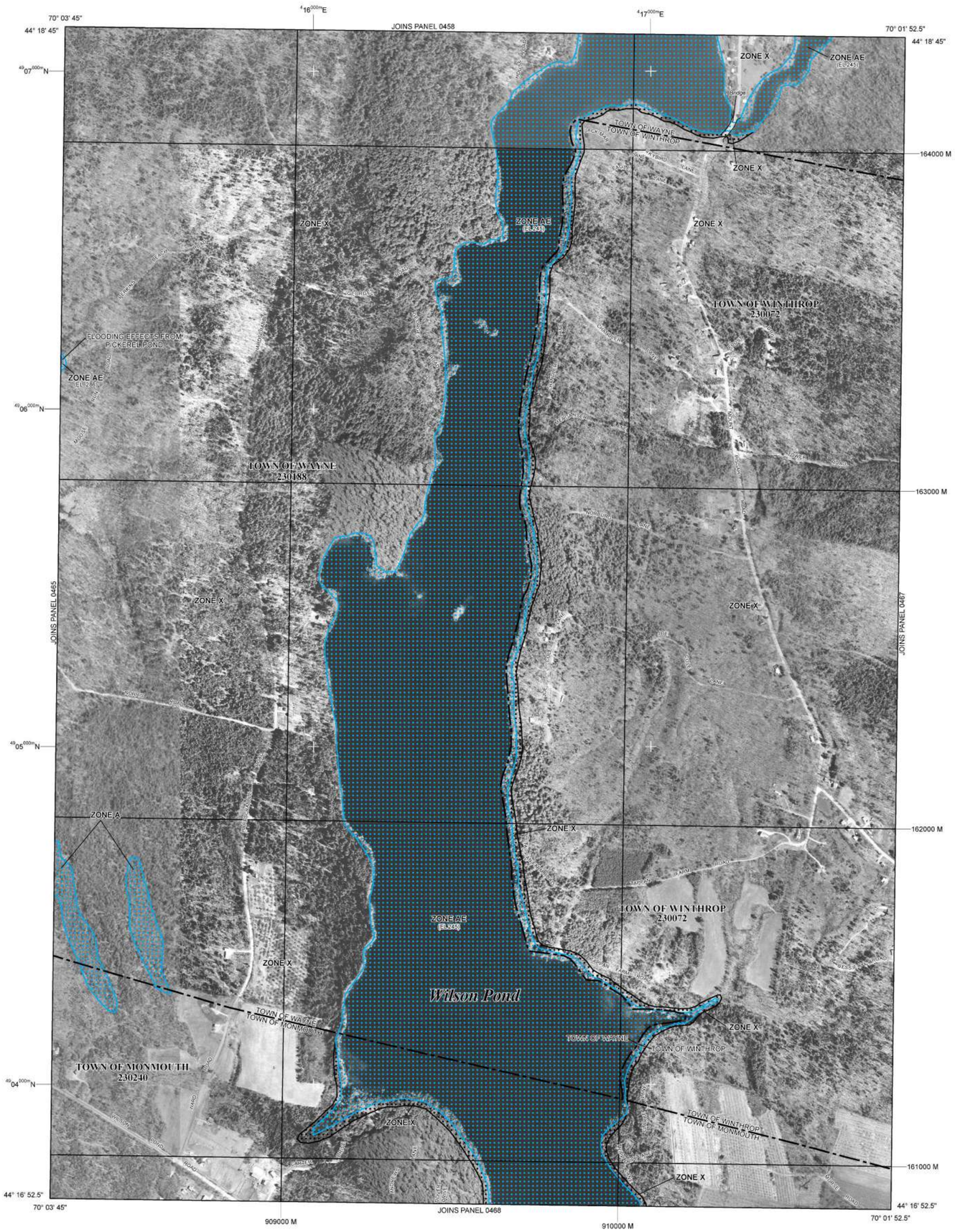
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map,** how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

State of Maine Floodway Note: Under the Maine Revised Statutes Annotated (M.R.S.A.) Title 38 § 439-A, 7C where the floodway is not designated on the Flood Insurance Rate Map, the floodway is considered to be the channel of a river or other water course and the adjacent land areas to a distance of one-half the width of the floodplain, as measured from the normal high water mark to the upland limit of the floodplain, unless a technical evaluation certified by a registered professional engineer is provided demonstrating the actual floodway based upon approved FEMA modeling methods.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	1% Annual Chance Floodplain Boundary
	0.2% Annual Chance Floodplain Boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

A — A	Cross section line
23 — 23	Transect line
	Culvert
	Bridge
45° 02' 08", 93° 02' 12"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
4989000 M	1000-meter ticks: Maine State Plane West Zone (FIPS Zone 1802), Transverse Mercator projection
4989000mN	1000-meter Universal Transverse Mercator grid values, zone 19N
DX5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
M1.5	River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
June 16, 2011

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET
150 0 150 300 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0466D

FIRM

FLOOD INSURANCE RATE MAP

KENNEBEC COUNTY, MAINE
(ALL JURISDICTIONS)

PANEL 466 OF 775
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MONMOUTH, TOWN OF	230240	0466	D
WAYNE, TOWN OF	230188	0466	D
WINTHROP, TOWN OF	230072	0466	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
23011C0466D
EFFECTIVE DATE
JUNE 16, 2011

Federal Emergency Management Agency

F

Culvert Analysis

Culvert Sizing Summary

Project	Wayne Flood Vulnerability Assessment	**Project #**	169845
	Wayne, ME		
Calculated by	TNK / LRD	**Date**	3/18/2026
Checked by	DWC	**Date**	3/25/2026

		Existing		Result		Proposed					
Culvert ID	**Location**	Shape	Dimensions	Undersized?	Low Roadway?	Shape	Dimensions	Roadway Alterations	Reason for Inclusion	Notes	Priority
16345	Mt Pisgah	Open Arch	14'-1"x8'-9"	No	Yes	N/A	N/A	Raise 2'	Tempy Bridge, high TW, poor condition	No alterations to culvert needed, recommend raising roadway.	High
16349	Old Winthrop	Open Arch	10'-7'-3"	No	No	N/A	N/A	N/A	Stream crossing: Zone A floodplain	No urgent action recommended.	None
16351	Old Winthrop	Circular	4'	Yes	Yes	Box	8'x3'	Raise 5.8' OR provide 8'x3' box culvert at existing roadway elevation.	Crushed inlet	Existing HW/D ratio <1.5 due to significant wier flow and roadway overtopping, but existing culvert is undersized.	Medium
37202	Lord Rd	Circular	3'	Yes	No	Box	4'x3'	N/A	High TW, Zone AE floodplain, critical	Recommend upsizing culvert.	High
33919	Pond Rd	Box /w Headwall + Wingwalls	10'x8'	No	No	N/A	N/A	N/A	Hale's Brook, poor condition	No urgent action recommended.	None
34522	Walton Rd	Circular	4'	Yes	No	Box	7'x5'	N/A	High TW, Zone AE floodplain, critical	Recommend upsizing culvert.	High
34740	Coolidge Rd	Circular	5'	Yes	Yes	Box	10'x6'	Raise 1.6'	High TW, Zone AE floodplain, critical	Recommend raising roadway and upsizing culvert.	High
34567	N Wayne Rd	Circular	2.5'	No	No	N/A	N/A	N/A	vc	No urgent action recommended.	None
33890	N Wayne Rd	Circular	3'	Yes	No	Circular	4'	N/A	Zone AE floodplain, critical	Recommend upsizing culvert.	High
37308	Kents Hill Rd	Circular	1.5'	Yes	No	Box	4'x3'	N/A	Zone AE floodplain, critical	Recommend upsizing culvert.	High
NA5	Berry Road	Circular	2'	Yes	No	Box	4'x4'	N/A	Critically Undersized	Recommend upsizing culvert.	Medium

Culvert Sizing Summary

Project	Wayne CVA	**Project #**	169845
	Wayne, ME		
Calculated by	TNK	**Date**	3/18/2026
Checked by	DWC	**Date**	3/25/2026

Yes
No

Culvert sizing assumptions:

- Roadway elevation is from bare earth LiDAR surface
- Depth of cover from record drawings, verified with on-site culvert assessment
- Inlet type, pipe material, and pipe diameter identified from record drawings, verified with on-site culvert assessment
- Inverts are from record drawings with datum conversion, verified with on-site culvert assessment
- Pipe length is from record drawings, verified with on-site culvert assessment.
- Pipe slope is calculated from record drawings
- Design flows use StreamStats data. Minimum watershed area for regression equations used if StreamStats data is unavailable
- Crest length is assumed to be 100'.
-
-

Step 1a **Culvert Data:**

			Notes:
Culvert ID	16345		
Culvert Name	Mt Pisgah Rsd		
Shape	Open Bottom Arch		Verified per MEDOT Bridge Inventory record drawings
Material	CMP (Steel Plate)		Verified per MEDOT Bridge Inventory record drawings
Culvert Height	8.75	ft (105 in)	Verified per MEDOT Bridge Inventory record drawings
Culvert Width	14.08	ft (169 in)	Verified per MEDOT Bridge Inventory record drawings
Inlet Configuration	Mitered Slope		Verified per MEDOT Bridge Inventory record drawings
No. of Barrels	1		

Step 1b **Site Data/Roadway Data:**

Crest Length	100	ft	
Roadway Elevation	246.77	ft	Verified per LiDAR DEM, used for datum conversions from record plans (=101.55' plan datum)
Roadway Width	23	ft	Verified per MEDOT Bridge Inventory record drawings
Inlet Station	0+00	ft	*Set to 0+00 by default
Outlet Station	+60	ft	*Calculated based on length
Fill height	1.80		Verified per MEDOT Bridge Inventory record drawings
Inlet Elevation	236.22	ft	Calculated from MEDOT Bridge Inventory record drawings via datum conversion
Outlet Elevation	235.22	ft	Calculated from MEDOT Bridge Inventory record drawings via datum conversion
Culvert Length	60	ft	Verified per MEDOT Bridge Inventory record drawings
Culvert Slope	0.0167	ft/ft	Calculated from MEDOT Bridge Inventory record drawings

Step 2 **Discharge Data:**

StreamStats Watershed	Yes	cfs	See Streamstats report
10-yr	492.00	cfs	
25-yr	625.00	cfs	
50-yr	729.00	cfs	
100-yr	837.00	cfs	

Step 3 **Tailwater Data:**

Channel Invert Elevation	235.22	ft	
Tailwater Elevation	245.3	ft	Dexter Pond flood elevation

Step 4 **Critical Outputs:**

HW/D for 50-yr Free Discharge	0.98	
HW/D for 50-yr High TW Condition	1.38	
Roadway Overtopping in either condition?	High TW only	
Roadway Elev - High TW	1.47	If >2ft, roadway is also low. Investigate raising roadway elevation.
Undersized?	No, raise roadway	If yes, proceed to Step 5 below.

Step 5 **Proposed Upsizing Critical Outputs:**

Proposed Culvert Size:	Existing		Culvert is not undersized, raise roadway
Proposed Roadway Elevation	249.27	ft	Propose raising roadway 2.5' due to proximity to high TW condition
HW/D for 50-yr Free Discharge	0.98		
HW/D for 50-yr High TW Condition	1.26		
Roadway Overtopping in either condition?	No		

Culvert Sizing Summary

Project	Wayne CVA	**Project #**	169845
	Wayne, ME		
Calculated by	TNK	**Date**	3/19/2026
Checked by	DWC	**Date**	3/25/2026

Yes
No

Culvert sizing assumptions:

- Roadway elevation is from bare earth LiDAR surface
- Depth of cover estimated from on-site culvert assessment
- Inlet type, pipe material, and pipe diameter identified from on-site culvert assessment
- Inverts are interpolated based on roadway elevation, depth of cover, and pipe diameter
- Pipe length estimated based on aerial imagery, on-site culvert assessment, and record drawings where applicable.
- Pipe slope assumed at 1% unless notable elevation difference between inlet and outlet recorded by on-site culvert assessment
- Design flows use StreamStats data. Minimum watershed area for regression equations used if StreamStats data is unavailable
- Crest length is assumed to be 100'.

Step 1a **Culvert Data:**

			Notes:
Culvert ID	16349		
Culvert Name	Old Winthrop Rd		
Shape	Open Bottom Arch		Verified per site photos
Material	CMP		Verified per site photos
Culvert Height	7.3	ft	Verified per site photos
Culvert Width	10	ft	Verified per site photos
Inlet Configuration	Mitered Slope		Verified per site photos
No. of Barrels	1		

Step 1b **Site Data/Roadway Data:**

Crest Length	100	ft	
Roadway Elevation	316.75	ft	Verified per LiDAR DEM
Roadway Width	21	ft	
Inlet Station	=0+00	ft	*Set to 0+00 by default
Outlet Station	+40	ft	*Calculated based on length
Fill height	3	ft	Verified per site photos
Inlet Elevation	306.42	ft	
Outlet Elevation	306.02	ft	
Culvert Length	40	ft	Verified per aerial imagery
Culvert Slope	0.01	ft/ft	

Step 2 **Discharge Data:**

StreamStats Watershed	Yes	cfs	See Streamstats report
10-yr	109.00	cfs	
25-yr	143.00	cfs	
50-yr	170.00	cfs	
100-yr	199.00	cfs	

Step 3 **Tailwater Data:**

Channel Invert Elevation	306.02	ft	
Tailwater Elevation	244.5	ft	Wilson Pond flood elevation, not relevant at this culvert

Step 4 **Critical Outputs:**

HW/D for 50-yr Free Discharge	0.53	
HW/D for 50-yr High TW Condition	N/A	100-yr flood elevation for downstream water body is below culvert invert, no scenario needed.
Roadway Overtopping in either condition?	No	
Undersized?	No	If yes, proceed to Step 5 below.

Step 5 **Proposed Upsizing Critical Outputs:**

Proposed Culvert Size:	
HW/D for 50-yr Free Discharge	
HW/D for 50-yr High TW Condition	
Roadway Overtopping in either condition?	

Culvert Sizing Summary

Project	Wayne CVA Wayne, ME	**Project #**	169845
Calculated by	LRD	**Date**	3/18/2026
Checked by	DWC	**Date**	3/26/2026

Culvert sizing assumptions:

- Roadway elevation is from bare earth LiDAR surface
- Depth of cover estimated from on-site culvert assessment
- Inlet type, pipe material, and pipe diameter identified from on-site culvert assessment
- Inverts are interpolated based on roadway elevation, depth of cover, and pipe diameter
- Pipe length estimated based on aerial imagery, on-site culvert assessment, and record drawings where applicable.
- Pipe slope assumed at 1% unless notable elevation difference between inlet and outlet recorded by on-site culvert assessment
- Design flows use StreamStats data. Minimum watershed area for regression equations used if StreamStats data is unavailable
- Crest length is assumed to be 100'.
-

Culvert-specific notes:

- Pipe is partially crushed at the inlet.
- Some collected data identifies shape as pipe arch. This has been revised to circular per site photos.
- Culvert elevations are such that downstream waterbody flood elevations do not impact tailwater conditions. Only free discharge conditions have been modeled.
- Based on site information and field data, culvert appears to run parallel to Old Winthrop Rd, not perpendicular. Relatively steep side slopes off of Old Winthrop Rd indicate that this culvert may not be vital to roadway operations.

Step 1a **Culvert Data:**

Culvert ID	16351		
Culvert Name	Old Winthrop Rd		
Shape	Circular		Verified per site photos
Material	Corrugated Metal		Verified per site photos
Culvert Height	4.00	ft	Verified per site photos
Culvert Width	N/A	ft	Verified per site photos
Inlet Configuration	Projecting		Verified per site photos
No. of Barrels	1		

Step 1b **Site Data/Roadway Data:**

Crest Length	100	ft	
Roadway Elevation	343.9	ft	Verified per LiDAR DEM
Roadway Width	22	ft	Verified per aerial imagery
Inlet Station	=0+00	ft	*Set to 0+00 by default
Outlet Station	+41	ft	*Calculated based on length
Fill height	1		
Inlet Elevation	338.9	ft	
Outlet Elevation	338.5	ft	
Culvert Length	41	ft	
Culvert Slope	0.01	ft/ft	Verified per aerial imagery

Step 2 **Discharge Data:**

StreamStats Watershed	Yes	cfs	See Streamstats report
10-yr	77.60	cfs	
25-yr	103.00	cfs	
50-yr	123.00	cfs	
100-yr	146.00	cfs	

Step 3 **Tailwater Data:**

Channel Invert Elevation	338.5	ft	
Tailwater Elevation	244.5	ft	Wilson Pond (100-yr flood elevation for downstream water body is below culvert invert)

Step 4 **Critical Outputs:**

HW/D for 50-yr Free Discharge	1.31	
HW/D for 50-yr High TW Condition	N/A	100-yr flood elevation for downstream water body is below culvert invert, no scenario needed.
Roadway Overtopping in either condition?	Yes	
Roadway Elev - High TW	99.4	If >2ft, roadway is also low. Investigate raising roadway elevation.
Undersized?	Yes	If yes, proceed to Step 5 below.

Step 5 **Proposed Upsizing Critical Outputs: PR Culvert EX roadway elevation**

Proposed Culvert Size:	Concrete Box (8' x 3')		Sized to provide 1' freeboard for 100-yr high TW condition, as well as 2 ft of fill
Proposed Roadway Elevation	N/A	ft	
HW/D for 50-yr Free Discharge	1.1		
HW/D for 50-yr High TW Condition	N/A		100-yr flood elevation for downstream water body is below culvert invert, no scenario needed.
Roadway Overtopping in either condition?	No		

Proposed Upsizing Critical Outputs: EX Culvert PR roadway elevation

Existing Culvert Size:	4' Corrugated Metal		
Proposed Roadway Elevation	349.7	ft	Raising roadway 5.8' to achieve 1' FB at free discharge condition.
HW/D for 50-yr Free Discharge	1.92		
HW/D for 50-yr High TW	N/A		100-yr flood elevation for downstream water body is below culvert invert, no scenario needed.
Roadway Overtopping in either condition?	No		

Culvert Sizing Summary

Project	Wayne CVA	**Project #**	169845
	Wayne, ME		
Calculated by	LRD	**Date**	3/18/2026
Checked by	DWC	**Date**	3/26/2026

Yes
No

Culvert sizing assumptions:

- Roadway elevation is from bare earth LiDAR surface
- Depth of cover estimated from on-site culvert assessment
- Inlet type, pipe material, and pipe diameter identified from on-site culvert assessment
- Inverts are interpolated based on roadway elevation, depth of cover, and pipe diameter
- Pipe length estimated based on aerial imagery, on-site culvert assessment, and record drawings where applicable.
- Pipe slope assumed at 1% unless notable elevation difference between inlet and outlet recorded by on-site culvert assessment
- Design flows use StreamStats data. Minimum watershed area for regression equations used if StreamStats data is unavailable
- Crest length is assumed to be 100'.
- As-built or record plans were not available for this specific culvert.

Step 1a **Culvert Data:**

			Notes:
Culvert ID	37202		
Culvert Name	Lord Road		
Shape	Circular		Verified per site photos
Material	HDPE - Smooth PE		Verified per site photos
Culvert Height	3	ft	Verified per site photos
Culvert Width	N/A	ft	Verified per site photos
Inlet Configuration	Projecting		Verified per site photos
No. of Barrels	1		

Step 1b **Site Data/Roadway Data:**

Crest Length	100	ft	
Roadway Elevation	289.7	ft	
Roadway Width	21	ft	
Inlet Station	=0+00	ft	*Set to 0+00 by default
Outlet Station	+52	ft	*Calculated based on length
Fill height	2	ft	Verified per site photos
Inlet Elevation	284.7	ft	
Outlet Elevation	284.2	ft	
Culvert Length	52	ft	
Culvert Slope	0.01	ft/ft	Verified per aerial imagery

Step 2 **Discharge Data:**

StreamStats Watershed	Yes	cfs	See Streamstats report
10-yr	37.60	cfs	
25-yr	48.80	cfs	
50-yr	57.60	cfs	
100-yr	67.00	cfs	

Step 3 **Tailwater Data:**

Channel Invert Elevation	284.2	ft	
Tailwater Elevation	288.6	ft	Pocasset Lake flood elevation

Step 4 **Critical Outputs:**

HW/D for 50-yr Free Discharge	1.68	
HW/D for 50-yr High TW Condition	1.71	
Roadway Overtopping in either condition?	Yes	100-yr flood elevation for downstream water body is below culvert invert, no scenario needed.
Roadway Elev - High TW	1.1	If >2ft, roadway is also low. Investigate raising roadway elevation.
Undersized?	Yes	If yes, proceed to Step 5 below.

Step 5 **Proposed Upsizing Critical Outputs:**

Proposed Culvert Size:	Concrete Box Culvert (4' x 3')		Sized to provide 1' freeboard for 100-yr high TW condition
Proposed Roadway Elevation	290.7	ft	Propose raising roadway 1' due to proximity to high TW condition
HW/D for 50-yr Free Discharge	1.05		
HW/D for 50-yr High TW Condition	1.51		
Roadway Overtopping in either condition?	No		

Culvert Sizing Summary

Project	Wayne CVA	**Project #**	169845
	Wayne, ME		
Calculated by	LRD	**Date**	3/18/2026
Checked by	DWC	**Date**	

Yes
No

Culvert sizing assumptions:

- Roadway elevation is from bare earth LiDAR surface
- Depth of cover from record drawings, verified with on-site culvert assessment
- Inlet type, pipe material, and pipe diameter identified from record drawings, verified with on-site culvert assessment
- Inverts are not clearly marked on record drawings, they are interpolated based on roadway elevation, depth of cover, and culvert height
- Pipe length is from record drawings, verified with on-site culvert assessment.
- Pipe slope is calculated from record drawings
- Design flows use StreamStats data. Minimum watershed area for regression equations used if StreamStats data is unavailable
- Crest length is assumed to be 100'.

Step 1a **Culvert Data:**

			Notes:
Culvert ID	33919		
Culvert Name	Pond Road		
Shape	Box		Verified per MEDOT Bridge Inventory record drawings
Material	Reinforced Concrete		Verified per MEDOT Bridge Inventory record drawings
Culvert Height	8	ft	Verified per MEDOT Bridge Inventory record drawings
Culvert Width	10	ft	Verified per MEDOT Bridge Inventory record drawings
Inlet Configuration	Headwall and Wingwalls (30-60deg)		Verified per MEDOT Bridge Inventory record drawings
No. of Barrels	1		

Step 1b **Site Data/Roadway Data:**

Crest Length	100	ft	
Roadway Elevation	311.3	ft	Verified per LiDAR DEM, used for datum conversions from record plans (=55' plan datum)
Roadway Width	26	ft	Verified per MEDOT Bridge Inventory record drawings
Inlet Station	=0+00	ft	*Set to 0+00 by default
Outlet Station	+45	ft	*Calculated based on length
Fill height	6.00		Verified per site photos
Inlet Elevation	297.3	ft	No clear inverts on record drawings
Outlet Elevation	297.3	ft	
Culvert Length	45.4	ft	Verified per MEDOT Bridge Inventory record drawings
Culvert Slope	0	ft/ft	

Step 2 **Discharge Data:**

StreamStats Watershed	Yes	cfs	See Streamstats report
10-yr	334	cfs	
25-yr	427	cfs	
50-yr	500	cfs	
100-yr	577	cfs	

Step 3 **Tailwater Data:**

Channel Invert Elevation	297.3	ft	
Tailwater Elevation	288.6	ft	Pocasset Lake flood elevation, not relevant at this culvert

Step 4 **Critical Outputs:**

HW/D for 50-yr Free Discharge	0.9	
HW/D for 50-yr High TW Condition	N/A	100-yr flood elevation for downstream water body is below culvert invert, no scenario needed.
Roadway Overtopping in either condition?	No	
Roadway Elev - High TW	22.68	If >2ft, roadway is also low. Investigate raising roadway elevation.
Undersized?	No	If yes, proceed to Step 5 below.

Step 5 **Proposed Upsizing Critical Outputs:**

Proposed Culvert Size:	
HW/D for 50-yr Free Discharge	
HW/D for 50-yr High TW Condition	
Roadway Overtopping in either condition?	

Culvert Sizing Summary

Project	Wayne CVA	**Project #**	169845
	Wayne, ME		
Calculated by	LRD	**Date**	3/18/2026
Checked by	DWC	**Date**	

Culvert sizing assumptions:

- Roadway elevation is from bare earth LiDAR surface
- Depth of cover estimated from on-site culvert assessment
- Inlet type, pipe material, and pipe diameter identified from on-site culvert assessment
- Inverts are interpolated based on roadway elevation, depth of cover, and pipe diameter
- Pipe length estimated based on aerial imagery, on-site culvert assessment, and record drawings where applicable.
- Pipe slope assumed at 1% unless notable elevation difference between inlet and outlet recorded by on-site culvert assessment
- Design flows use StreamStats data. Minimum watershed area for regression equations used if StreamStats data is unavailable
- Crest length is assumed to be 100'.
-
-

Step 1a **Culvert Data:**

			Notes:
Culvert ID	34522		
Culvert Name	Walton Rd		
Shape	Circular		Verified per site photos
Material	Smooth PE		Verified per site photos
Culvert Height	4	ft	Verified per site photos
Culvert Width	N/A	ft	Verified per site photos
Inlet Configuration	Projecting		Verified per site photos
No. of Barrels	1		

Step 1b **Site Data/Roadway Data:**

Crest Length	100	ft	
Roadway Elevation	294.2	ft	Verified per LiDAR DEM
Roadway Width	22	ft	
Inlet Station	=0+00	ft	*Set to 0+00 by default
Outlet Station	+61	ft	*Calculated based on length
Fill height	3	ft	Verified per site photos
Inlet Elevation	287.2	ft	
Outlet Elevation	286.6	ft	
Culvert Length	61	ft	Verified per aerial imagery
Culvert Slope	0.01	ft/ft	

Step 2 **Discharge Data:**

StreamStats Watershed	Yes	cfs	See Streamstats report
10-yr	121.00	cfs	
25-yr	159.00	cfs	
50-yr	189.00	cfs	
100-yr	222.00	cfs	

Step 3 **Tailwater Data:**

Channel Invert Elevation	286.6	ft	
Tailwater Elevation	288.6	ft	Pocasset Lake flood elevation

Step 4 **Critical Outputs:**

HW/D for 50-yr Free Discharge	1.84	
HW/D for 50-yr High TW Condition	1.84	
Roadway Overtopping in either condition?	Yes	
Roadway Elev - High TW	5.62	If >2ft, roadway is also low. Investigate raising roadway elevation.
Undersized?	Yes	If yes, proceed to Step 5 below.

Step 5 **Proposed Upsizing Critical Outputs:**

Proposed Culvert Size:	Concrete Box (7' x 5')	
HW/D for 50-yr Free Discharge	0.95	
HW/D for 50-yr High TW Condition	0.95	
Roadway Overtopping in either condition?	No	

Culvert Sizing Summary

Project	Wayne CVA	**Project #**	169845
	Wayne, ME		
Calculated by	LRD	**Date**	3/16/2026
Checked by	DWC	**Date**	

Culvert sizing assumptions:

- Roadway elevation is from bare earth LiDAR surface
- Depth of cover estimated from on-site culvert assessment
- Inlet type, pipe material, and pipe diameter identified from on-site culvert assessment
- Inverts are interpolated based on roadway elevation, depth of cover, and pipe diameter
- Pipe length estimated based on aerial imagery, on-site culvert assessment, and record drawings where applicable.
- Pipe slope assumed at 1% unless notable elevation difference between inlet and outlet recorded by on-site culvert assessment
- Design flows use StreamStats data. Minimum watershed area for regression equations used if StreamStats data is unavailable
- Crest length is assumed to be 100'.
-
-

Step 1a **Culvert Data:**

			Notes:
Culvert ID	34740		
Culvert Name	Coolidge Rd		
Shape	Circular		Verified per site photos
Material	Corrugated Metal		Verified per site photos
Culvert Height	5	ft	Verified per site photos
Culvert Width	N/A	ft	Verified per site photos
Inlet Configuration	Projecting		Verified per site photos
No. of Barrels	1		

Step 1b **Site Data/Roadway Data:**

Crest Length	100	ft	
Roadway Elevation	286.4	ft	
Roadway Width	20	ft	
Inlet Station	0+00	ft	*Set to 0+00 by default
Outlet Station	+68	ft	*Calculated based on length
Fill height	3	ft	
Inlet Elevation	278.4	ft	
Outlet Elevation	277.8	ft	
Culvert Length	68	ft	
Culvert Slope	0.01	ft/ft	

Step 2 **Discharge Data:**

StreamStats Watershed	Yes	cfs	See Streamstats report
10-yr	169.00	cfs	
25-yr	218.00	cfs	
50-yr	256.00	cfs	
100-yr	297.00	cfs	

Step 3 **Tailwater Data:**

Channel Invert Elevation	276.3	ft	
Tailwater Elevation	285.8	ft	Androscoggin Lake

Step 4 **Critical Outputs:**

HW/D for 50-yr Free Discharge	1.67	
HW/D for 50-yr High TW Condition	1.73	
Roadway Overtopping in either condition?	Yes	
Roadway Elev - High TW	0.6	If >2ft, roadway is also low. Investigate raising roadway elevation.
Undersized?	Yes	If yes, proceed to Step 5 below.

Step 5 **Proposed Upsizing Critical Outputs:**

Proposed Culvert Size:	Concrete Box (10' X 6')		Sized to provide freeboard for 100-yr high TW condition (1' clearance not possible due to downstream flooding elevation)
Proposed Roadway Elevation	288	ft	Propose raising roadway 1.6' due to proximity to high TW condition
HW/D for 50-yr Free Discharge	0.77		
HW/D for 50-yr High TW Condition	1.31		
Roadway Overtopping in either condition?	No		

Culvert Sizing Summary

Project	Wayne CVA	Project #	
	Wayne, ME		
Calculated by	LRD	Date	3/18/2026
Checked by	DWC	Date	

Yes
No

Culvert sizing assumptions:

- Roadway elevation is from bare earth LiDAR surface
- Depth of cover estimated from on-site culvert assessment
- Inlet type, pipe material, and pipe diameter identified from on-site culvert assessment
- Inverts are interpolated based on roadway elevation, depth of cover, and pipe diameter
- Pipe length estimated based on aerial imagery, on-site culvert assessment, and record drawings where applicable.
- Pipe slope assumed at 1% unless notable elevation difference between inlet and outlet recorded by on-site culvert assessment
- Design flows use StreamStats data. Minimum watershed area for regression equations used if StreamStats data is unavailable
- Crest length is assumed to be 100'.

Step 1a **Culvert Data:**

			Notes:
Culvert ID	34567		
Culvert Name	N Wayne Rd		
Shape	Circular		Verified per site photos
Material	Corrugated Metal		Verified per site photos
Culvert Height	2.5	ft	
Culvert Width	N/A	ft	
Inlet Configuration	Projecting		Verified per site photos
No. of Barrels	1		

Step 1b **Site Data/Roadway Data:**

Crest Length	100	ft	
Roadway Elevation	375.6	ft	
Roadway Width	22	ft	
Inlet Station	=0+00	ft	*Set to 0+00 by default
Outlet Station	+58	ft	*Calculated based on length
Fill height	7	ft	
Inlet Elevation	366.1	ft	
Outlet Elevation	365.5	ft	
Culvert Length	58	ft	
Culvert Slope	0.01	ft/ft	

Step 2 **Discharge Data:**

StreamStats Watershed	Yes	cfs	See Streamstats report
10-yr	18.50	cfs	
25-yr	25.40	cfs	
50-yr	31.00	cfs	
100-yr	37.30	cfs	

Step 3 **Tailwater Data:**

Channel Invert Elevation	363.5	ft	
Tailwater Elevation	288.6	ft	Pocasset Lake (Upstream from Pickerel Pond), not relevant at this culvert

Step 4 **Critical Outputs:**

HW/D for 50-yr Free Discharge	1.54	
HW/D for 50-yr High TW Condition	N/A	100-yr flood elevation for downstream water body is below culvert invert, no scenario needed.
Roadway Overtopping in either condition?	No	
Undersized?	No	If yes, proceed to Step 5 below.

Step 5 **Proposed Upsizing Critical Outputs:**

Proposed Culvert Size:		Existing culvert already meets 1' of freeboard, proposed culvert meets freebaord as well as HW/D =< 1.5
HW/D for 50-yr Free Discharge		
HW/D for 50-yr High TW Condition		
Roadway Overtopping in either condition?		

Culvert Sizing Summary

Project	Wayne CVA	**Project #**	
	Wayne, ME		
Calculated by	LRD	**Date**	3/18/2026
Checked by	DWC	**Date**	3/25/2026

Yes
No

Culvert sizing assumptions:

- Roadway elevation is from bare earth LiDAR surface
- Depth of cover estimated from on-site culvert assessment
- Inlet type, pipe material, and pipe diameter identified from on-site culvert assessment
- Inverts are interpolated based on roadway elevation, depth of cover, and pipe diameter
- Pipe length estimated based on aerial imagery, on-site culvert assessment, and record drawings where applicable.
- Pipe slope assumed at 1% unless notable elevation difference between inlet and outlet recorded by on-site culvert assessment
- Design flows use StreamStats data. Minimum watershed area for regression equations used if StreamStats data is unavailable
- Crest length is assumed to be 100'.

Step 1a **Culvert Data:**

			Notes:
Culvert ID	33890		
Culvert Name	N Wayne Rd		
Shape	Circular		Verified per site photos
Material	Corrugated Metal		Verified per site photos
Culvert Height	3	ft	
Culvert Width	N/A	ft	
Inlet Configuration	Projecting		Verified per site photos
No. of Barrels	1		

Step 1b **Site Data/Roadway Data:**

Crest Length	100	ft	
Roadway Elevation	298.8	ft	
Roadway Width	22	ft	
Inlet Station	=0+00	ft	*Set to 0+00 by default
Outlet Station	+79	ft	*Calculated based on length
Fill height	6	ft	
Inlet Elevation	289.8	ft	
Outlet Elevation	289.0	ft	
Culvert Length	79	ft	
Culvert Slope	0.01	ft/ft	

Step 2 **Discharge Data:**

StreamStats Watershed	Yes	cfs	See Streamstats report
10-yr	55.20	cfs	
25-yr	74.50	cfs	
50-yr	90.10	cfs	
100-yr	107.00	cfs	

Step 3 **Tailwater Data:**

Channel Invert Elevation	289.0	ft	
Tailwater Elevation	288.3	ft	Pocasset Lake (100-yr flood elevation for downstream water body is below culvert invert)

Step 4 **Critical Outputs:**

HW/D for 50-yr Free	3.04	
HW/D for 50-yr High TW Condition	N/A	
Roadway Overtopping in either condition?	Yes	
Roadway Elev - High TW	10.5	If >2ft, roadway is also low. Investigate raising roadway elevation.
Undersized?	Yes	If yes, proceed to Step 5 below.

Step 5 **Proposed Upsizing Critical Outputs:**

Proposed Culvert Size:	Smooth HDPE 4 ft dia.		Sized to provide 1' freeboard for 100-yr high TW condition
Proposed Roadway Elevation	N/A	ft	No roadway raising needed
HW/D for 50-yr Free	1.34		
HW/D for 50-yr High TW Condition	1.34		
Roadway Overtopping in either condition?	No		

Culvert Sizing Summary

Project	Wayne CVA Wayne, ME	**Project #**	
Calculated by	LRD	**Date**	3/27/2026
Checked by	DWC	**Date**	3/30/2026

Yes
No

Culvert sizing assumptions:

- Roadway elevation is from bare earth LiDAR surface
- Depth of cover estimated from on-site culvert assessment
- Inlet type, pipe material, and pipe diameter identified from on-site culvert assessment
- Inverts are interpolated based on roadway elevation, depth of cover, and pipe diameter
- Pipe length estimated based on aerial imagery, on-site culvert assessment, and record drawings where applicable.
- Pipe slope assumed at 1% unless notable elevation difference between inlet and outlet recorded by on-site culvert assessment
- Design flows use StreamStats data. Minimum watershed area for regression equations used if StreamStats data is unavailable
- Crest length is assumed to be 100'.

Step 1a **Culvert Data:**

			Notes:
Culvert ID	37308		
Culvert Name	Kents Hill Rd		
Shape	Circular		Verified per site photos
Material	Corrugated Metal		Verified per site photos
Culvert Height	1.5	ft	Verified per site photos
Culvert Width	N/A	ft	
Inlet Configuration	Projecting		Verified per site photos
No. of Barrels	1		Verified per site photos

Step 1b **Site Data/Roadway Data:**

Crest Length	100	ft	
Roadway Elevation	307.5	ft	Verified per LiDAR DEM
Roadway Width	21	ft	Verified per aerial imagery
Inlet Station	=0+00	ft	*Set to 0+00 by default
Outlet Station	+61	ft	*Calculated based on length
Fill height	4	ft	Verified per site photos
Inlet Elevation	302.0	ft	
Outlet Elevation	301.4	ft	
Culvert Length	61	ft	
Culvert Slope	0.01	ft/ft	

Step 2 **Discharge Data:**

StreamStats Watershed	Yes	cfs	See Streamstats report
10-yr	44.50	cfs	
25-yr	60.10	cfs	
50-yr	72.80	cfs	
100-yr	86.60	cfs	

Step 3 **Tailwater Data:**

Channel Invert Elevation	301.4	ft	Verified per site photos
Tailwater Elevation	288.6	ft	Pocasset Lake (100-yr flood elevation for downstream water body is below culvert invert)

Step 4 **Critical Outputs:**

HW/D for 50-yr Free Discharge	3.89	
HW/D for 50-yr High TW Condition	N/A	
Roadway Overtopping in either condition?	Yes	
Roadway Elev - High TW	6.1	If >2ft, roadway is also low. Investigate raising roadway elevation.
Undersized?	Yes	If yes, proceed to Step 5 below.

Step 5 **Proposed Upsizing Critical Outputs:**

Proposed Culvert Size:	4' x 3' Concrete Box Culvert		PR culvert provides 1' FB from roadway, 2' of fill, as well as HW/D ratio<1.5
Proposed Roadway Elevation	N/A	ft	No roadway raising needed
HW/D for 50-yr Free Discharge	1.26		
HW/D for 50-yr High TW Condition	N/A		
Roadway Overtopping in either condition?	No		

Culvert Sizing Summary

Project	Wayne CVA	**Project #**	
	Wayne, ME		
Calculated by	LRD	**Date**	4/20/2026
Checked by	DWC	**Date**	

Yes
No

Culvert sizing assumptions:

- Roadway elevation is from bare earth LiDAR surface
- Depth of cover estimated from on-site culvert assessment
- Inlet type, pipe material, and pipe diameter identified from on-site culvert assessment
- Inverts are interpolated based on roadway elevation, depth of cover, and pipe diameter
- Pipe length estimated based on aerial imagery, on-site culvert assessment, and record drawings where applicable.
- Pipe slope assumed at 1% unless notable elevation difference between inlet and outlet recorded by on-site culvert assessment
- Design flows use StreamStats data. Minimum watershed area for regression equations used if StreamStats data is unavailable
- Crest length is assumed to be 100'.

Step 1a **Culvert Data:**

			Notes:
Culvert ID	NA5		
Culvert Name			
Shape	Circular		Verified per site photos
Material	Reinforced Concrete		Verified per site photos
Culvert Height	2	ft	Verified per site photos
Culvert Width	N/A	ft	
Inlet Configuration	Projecting		Verified per site photos
No. of Barrels	1		

Step 1b **Site Data/Roadway Data:**

Crest Length	100	ft	
Roadway Elevation	350.6	ft	Verified per LiDAR DEM
Roadway Width	20	ft	Verified per aerial imagery
Inlet Station	=0+00	ft	*Set to 0+00 by default
Outlet Station	1+00	ft	*Calculated based on length
Fill height	8	ft	Verified per site photos
Inlet Elevation	340.6	ft	
Outlet Elevation	340.2	ft	
Culvert Length	44	ft	
Culvert Slope	0.01	ft/ft	

Step 2 **Discharge Data:**

StreamStats Watershed	Yes	cfs	See Streamstats report
10-yr	79.50	cfs	
25-yr	107.00	cfs	
50-yr	130.00	cfs	
100-yr	154.00	cfs	

Step 3 **Tailwater Data:**

Channel Invert Elevation	340.16	ft	Verified per site photos
Tailwater Elevation	N/A	ft	Androscoggin

Step 4 **Critical Outputs:**

HW/D for 50-yr Free Discharge	5.2	
HW/D for 50-yr High TW Condition	N/A	
Roadway Elev - High TW	10.4	If >2ft, roadway is also low. Investigate raising roadway elevation.
Roadway Overtopping in either condition?	Yes	
Undersized?	Yes	If yes, proceed to Step 5 below.

Step 5 **Proposed Upsizing Critical Outputs:**

Proposed Culvert Size:	4'x4' Concrete Box Culvert		PR culvert provides 1' FB from roadway, 2' of fill, as well as HW/D ratio<1.5
HW/D for 50-yr Free Discharge	1.44		
Proposed Roadway Elevation	N/A	ft	No roadway raising needed
HW/D for 50-yr High TW Condition	N/A		
Roadway Overtopping in either condition?	No		