Nonpoint Source Planning Grant

Winter Road Maintenance Report Outline

NEW YORK STATE | Department of Environmental Conservation

Plans for winter road maintenance to outline proposed road salt reducing practices at the municipal level. The plan must identify current practices, environmentally sensitive areas, and proposed best management practices to reduce road salt application. Plans must be completed by a highway professional with 2 years of relevant experience; OR professional hydrologist or professional geologist with 2 years of relevant experience; OR bachelor's degree in hydrology or a related field with 2 years of relevant experience; OR associate degree in hydrology or a related field with 5 years of relevant experience.

Required Elements

I. **Cover Page** (project title, Municipality, prepared by, and date)

II. **Executive Summary**: Overview of the plans purpose, location and receiving bodies of water

III. **Projective Objectives:** Describe goals for winter road maintenance plan. Include a project background description and history/problem statement.

IV. **Existing Conditions:** Include an inventory of the current methods for snow removal and de-icing. Information collected must include but is not limited to:

   a. Waterbody Inventory: Mapping of waterbodies within the municipality and groundwater protection zones

   b. Road Inventory: Lane miles of roadway plowed, acres of parking lots, road density, plow route map

   c. Material Usage: current de-icing materials used, application rates per lane mile, material storage and stock piling, summary of existing imports (5-year average)

   d. Available resources: weather information, personnel, equipment

V. **Road Salt Reduction Plan Description:** Provide a narrative that explains the proposed road salt reduction practices and a justification for each of the following categories. Include a summary of the current method of treatment, proposed best management practice, equipment/material needs, estimated road salt reduction, and measures to evaluate success of the proposed practice. Include any existing road salt reduction practices or technologies that have already been implemented and clearly state as such.

   a. Material application (include information on material used, rate per inch of snow and road temperature, material used per storm event)
   b. Spreading Practices
   c. Plowing operation
   d. Prewetting, ground speed-oriented spreaders and pavement temperature sensors
   e. Equipment Calibration procedures
   f. Public/private sector outreach program and training
   g. Upgraded weather monitoring system
   h. Winter parking restrictions
   i. Low salt/no salt zones based on environmentally sensitive areas
   j. Storm log
   k. Policy
   l. Anticipated regulatory approval and permits (list all that will apply, e.g. NYSDEC, NYSDOT, etc.)

m. Overview matrix: total estimated reduction, total estimated salt imports after improvements
n. Implementation cost and timeline
o. Estimated reduction: existing imports, estimated percent reduction (tons/year), estimated reduction of imports

VI. Equipment Design Specifications: Specifications for road salt reduction practices must include equipment sizing and configuration, location, maintenance needs, etc.

VII. Installation and Operating Cost Estimate

VIII. Road Salt Reduction Training: Operators must receive road salt reduction training which, at a minimum, covers the following:

a. advanced plow technology
b. equipment calibration
c. creation, storage, and use of deicing brines

IX. Project Timeline

CONTACT INFORMATION

Division of Water Grants Team

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https://dec.ny.gov/get-involved/grant-applications/non-agricultural-nonpoint-source-planning-ms4-mapping-grant