

| Rank Category | Recommendation Category | Recommendation Category | Strategies: | Description: |
|---------------|--|-------------------------|---|---|
| 1 | Outreach, Information, & Education Program | (1-5) | Strategies: Outreach, Information, & Education Program | Description: Outreach, Information, & Education Program |
| | | 1 | Broad and cohesive messaging; | Cohesive messaging on chloride's use and impact will strengthen the outreach and information credibility and community awareness. |
| | | 2 | Strategic information, outreach, & education plan | Develop an education strategy that's foundational based on public and private partnerships with the goal of reducing chloride use to improve water quality. Stormwater pollution control is most effectively implemented when people and organizations understand the impact of stormwater pollution, its sources, and actions they can take to control it. The strategic plan should be adaptable and crafted to encompass information gathered through Assessing and Addressing Knowledge Gaps Strategies. |
| | | 3 | Advertising and outreach | Advertising and outreach programs will help foster positive behavior change for residents, businesses, and ice melt applicators to mitigate chlorides' environmental impact. Advertising and Outreach should be directed by the Strategic Information, Outreach, & Education Plan, to develop outreach and education efforts designed to engage customers, promote program success, and Hinkson Creeks CAM's goal. Public education materials will include visual and graphic images to ensure that residents and businesses are informed and actively participating in the mitigation of chloride impact and become better informed on chloride impact on the environment. |
| | | 4 | Cooperative group for ice melt applicators; | Equipment cost, knowledge, and accessibility can be barriers to adopting alternative best management practices. A cooperative group for sharing equipment, facilities, knowledge, and experiences may reduce these barriers and promote adoption of best management practices. |
| | | 5 | Promoting winter weather plans for businesses, residences, and snow removers. | These plans would consider working from home, alternative schedule, prioritization of safe pathways access to buildings, closing unsafe parking lots and entrances, proper footwear, and where to place snow piles |
| | | 6 | Communicating expectations surrounding a snow and ice event | To manage expectations, agencies should communicate strategies to community leadership, internal employees, and the community |
| | | 7 | Proper storage and disposal | Proper storage of chloride materials is crucial for preventing contaminated runoff and salt loss. The best practice for storing chloride-based ice melt |
| | | 8 | Peer-to-peer learning | Facilitate different property owners gathering annually to discuss best practices for snow removal. |
| | | 9 | Techniques for personal safety | Community members adopting personal safety practices could significantly reduce the need for frozen precipitations to be burnt to the pavement or entirely removed by ice melt. Providing techniques could empower the community to traverse slick surfaces appropriately. |
| 2 | Weather Information Systems | (1-5) | Strategies: Weather Information Systems | Description: Weather Information Systems |
| | | 1 | Cooperative information sharing between agencies | Cooperative information sharing between agencies enhancing existing relations between the University of Missouri, the City of Columbia, Boone County and encompassing municipalities, and the Missouri Department of Transportation, public schools and incorporated private contractors and businesses. |
| | | 2 | Road weather information systems for the users and community | Road Weather Information Systems (RWIS) are used to monitor the atmospheric conditions in a specific location. There are different capabilities of both the individual units and software analysis that can be performed based on the data collected. Most RWIS systems capture weather phenomena-specific information such as dew point, moisture at that moment, wind, temperature and other conditions along with specialized information such as pavement temperature and rising and falling data for what they are collecting. |
| | | 3 | Specialized weather services and forecasting; | Specializes in weather services and forecasting, providing detailed weather updates before, during, and after the storm. It would increase precision application to reduce unnecessary or ineffective chloride application, thereby reducing the amount of chloride entering the environment. This service should include timely, accurate, and dependable meteorological services that forecast the amount of snow or ice to expect and potential road conditions and provide recommendations for pre-treating shift scheduling and deicer amounts. |
| | | 4 | Atmospheric data | Local and real-time atmospheric data, including temperature, precipitation, wind, pressure, and cloud cover, can improve forecasting information, particularly if snow removers should prepare for rain, sleet, ice, or snow. The atmospheric data with specialized weather forecasting and road weather information systems would mitigate unnecessary or unsuitable chloride. |
| 2 | Assessing & Addressing Knowledge Gaps | (1-3) | Strategies: Assessing & Addressing Knowledge Gaps | Description: Assessing & Addressing Knowledge Gaps |
| | | 1 | Data gathering (business, residential, applicators); | Quantifying chloride use by governmental, municipal, private businesses, and citizen applicators would provide critical information for strategic outreach and education efforts, with increased results. |
| | | 2 | Stream, lake, and drainage system monitoring; | Understanding when and where chlorides are entering local waterways provides critical information for targeted mitigation efforts. Identifying frequency, duration and magnitude of chlorides in local waterways characterizes the immediate and long-term environmental impacts on aquatic resources. Consistently monitoring for chlorides in local waterways over time will inform climatic variation (season to season and year to year) and identify positive or negative water quality trends as watersheds develop. The above information would be shared with local stormwater managers to make informed decisions. |
| | | 3 | Publication of chloride data in the environment. | Accessible and understandable chloride data would connect people and ice melt applicators to the health of the streams and surrounding environment. Live data could influence the method of chloride application and its use when not required. |