**MS4 Permit Minimum Control Measure #1: Education and Outreach – Part I**

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| **Message 1: Fertilizer – P and N Impaired (this set draws heavily from existing materials available through UNH Cooperative Extension (CE) and NH Sea Grant (NHSG) primarily for Do-It-Yourselfers)** |
|  | **Objective** | **Partner Activities & Products** | **MS4 Responsibilities** | **Measurement** | **Anticipated Outcomes** | **Provider & Status** |
| **1** | ◾ Residents learn to leave grass clippings after mowing *as a source of nutrients**Do we also want to include these messages as well?* (Donate clippings for municipal composting OR Compost onsite away from water bodies.) | ◾ ***Press Release:*** Draft a press release highlighting new permit and outreach with emphasis on and link to lawn care messages and info sheets. ◾ ***Information Materials for Distribution:*** Provide municipalities with **lawn care info sheets and rack cards.** (available to print from web) to reinforce sound practices. HIGHLIGHT clippings. | ◾ Edit and distribute press release.◾ Print and distribute info sheets.  | ◾ # of potential readers. (MS4 tracks)◾ # of promotional materials distributed(MS4 tracks)◾ Change in UNHCE website visits. (UNHCE tracks) | More residents recognize they can leave clippings on the lawn after mowing as a source of slow release nutrients, thereby reducing the need for additional fertilizer application. In addition, residents know associated cultural practices that improve turf quality – mow high, no more than 1/3 blade, etc.Residents are encouraged to reduce the practice of raking or blowing clippings into drainage areas.  | UNH Cooperative Ext. (CE), NH Sea Grant and NHDES*Drafted info sheets* |
| ◾ ***Prompt Kits for Distribution:*** Assemble and distribute **prompt kits** for this action –to municipalities and select groups.   | ◾ Distribute prompt kits to lawn care enthusiasts in appropriate venue. | *(measures “reach”)*◾ # of promotional materials distributed | UNH Cooperative Ext. (CE) and NH Sea GrantPrompt kits created |
| **2** | ◾ Residents adopt good turf cultural practices (sans fertilizer) including testing their soil in order to have a snapshot of soil condition before taking further steps (to fertilize).  | ◾ ***Lawn Care Web and Video Resources:*** Share **UNH CE lawn care video clips** and **web-based materials** with municipalities (clippings, fertilizer use and composting) | ◾ View and promote videos and web pages in newsletters, blogs, websites and cable access(?). | ◾ # of hits to blogs and websites | More residents submit soil samples for testing in order to have site specific guidance on what to do (or not do) to improve their soil’s ability to grow grass. Soil test information, like soil phosphorus levels, potassium levels, pH and organic material, for example, should influence a consumer’s choice of lawn care products based on what is needed or not needed. | UNH Cooperative Ext. (CE) and NH Sea Grant and NHDES WASVideos and website completed. |
| ◾ ***Information Materials for Distribution:*** Provide municipalities with **lawn care info sheets** (available to print from web) to reinforce sound practices. HIGHLIGHT soil test. | ◾ Print and distribute info materials – e.g. at community plant sales? | *(measures “reach”)*◾ # of promotional materials distributed | UNH CE and NH Sea GrantDrafted info sheets |
| ◾ ***WQ Friendly Press Release:*** Draft a press release with a link to soil test info for MS4s to promote. ◾ Track # of soil tests through soils lab UNHCE. | ◾ Distribute press release◾ Pay for first #? soil tests (focus within a particular watershed?) |  *(measures change in soil test submissions relative to historic averages for that town, possibly attributed to promotion)*◾ Increase in # of soil tests submitted to Extension soil lab by town/city residents. | UNH CE and NH Sea Grant |
| ◾ ***Lawn Care Web and Video Resources:*** Share **UNH CE lawn care video clips** and **web-based materials** with municipalities (how to take and interpret a soil test).  | ◾ View and promote videos and web pages in newsletters, blogs, websites and cable access(?). | ◾ # of video viewings (RPC survey?) | UNH CE, NH Sea Grant and possibly SNHRPC. |
| **3** | ◾ Residents that are going to apply fertilizer identify how much should be applied, when, what kind, etc. BEFORE applying | ◾ ***Information Materials for Distribution:*** Provide municipalities with **lawn care info sheets** (available to print from web) to reinforce sound practices. HIGHLIGHT how to apply fertilizer. | ◾ Print and distribute info sheets.  | *(measures “reach”)*◾ # of promotional materials distributed | Residents who apply fertilizer apply according to WQFriendly recommendation re: amount, timing, product, irrigation, etc.  | UNH CE and NH Sea Grant |
| ◾ ***Prompt Kits for Distribution:*** Assemble and distribute **prompt kits** for this action –to municipalities and select groups.  | ◾ Distribute prompt kits at least one event/year (with ConsComm or DPW assistance) | *(measures “reach”)*◾ # of promotional materials distributed | UNH CE and NH Sea GrantPrompt Kits created  |
| ◾ ***Press Release:*** Draft a press release about promo effort | ◾ Promote recommendations through press release with URL to pledge sheet |  | UNH CE and NH Sea Grant |
| ◾ ***Pledge Sheet:*** Develop a pledge page that munis can use to promote a new behavior and track who took promo materials for follow up | ◾ Promote pledge sheet through various pieces (info sheet, news releases, blogs, newsletters, clinics, etc.) | *(measure intent to adopt a new practice)* ◾ # of names on pledge sheets | UNH CE and NH Sea Grant |
| ◾ ***Lawn Care Web and Video Resources:*** Share **UNH CE lawn care video clips** and **web-based materials** with municipalities (WQ sensitive fertilizer application) | ◾ View and promote videos and web pages in newsletters, blogs, websites and cable access(?).  | ◾ # of hits to blogs and websites | UNH CE and NH Sea GrantVideos created |
| **4** | ◾ Lawn care enthusiasts and opinion leaders increase their lawn care skills based on WQFriendly practices.  | ◾ ***Workshop/Clinic:*** Update Healthy Lawns Clean Water skills clinic. ◾ Work with Stormwater Coalition Outreach to promote and conduct two regional clinics | ◾ Promote and host two regional clinics | *(measure reach)*◾ # of participants*(measure intent to adopt)*◾ Survey participants intent to adopt “new” practices OR add to pledge page | Lawn care enthusiasts and opinion leaders increase in knowledge and skill related to WQ Friendly practices and help to shift norms around lawn care attitudes and behaviors in their communities.  | UNH CE and NH Sea GrantClinic created |
| **OR** | ◾ Landscapers in MS4s understand Landscaping to protect Water Quality practices | ◾ ***Landscaper Training:*** Notify MS4s in area of future UNH CE/Soak up the Rain/Sea Grant Landscaping for Water Quality 2 day trainings. Help promote. | ◾ Host, participate in and/or promote 2 day training to local landscapers. Check UNH CE website for list of landscapers who attended  | ◾ # of local landscapers attending training. | Landscapers adopt and promote more water quality friendly landscaping practices. The training also provides communities with an opportunity to present on their local WQ issues and landscaping regs or policies related to WQ.  | UNH CE and NH Sea Grant and NHDES Soak Up the Rain (SOAK)Trainings created |
| **5** | ◾ Redo any of above  |  |  |  | <http://www.stormwaterandme.org/index.asp>  | UNH CE and NH Sea Grant |
| **OR** | ◾ Sweep fertilizer (and other pollutants) off sidewalks and dispose of them properly to prevent pollutants from entering stormdrain systems.  | ◾ ***Stormdrain Stenciling:*** Coordinate stormdrain stenciling projects with communities and volunteers. | ◾ Participate in stormdrain stenciling projects, e.g. help identify appropriate neighborhoods; provide stormdrain maps, safety cones, paint, and DPW assistance, etc. ◾ Help alert media attention to stenciling event and info.  | ◾ # of participating volunteers, ◾ # of stormdrains stenciled | Stormdrain stenciling is a community-based activity that helps residents learn about the destination of stormwater in their neighborhoods. The activity creates an opportunity for observers to learn how materials on land can become water pollutants when they are carried into stormdrains.  | NH Sea Grant (others?) |

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| **Message 2: Pet Waste – P and N Impaired and Bacteria or P TMDL (this set draws from the “Inside Scoop: How to Conduct a Pet Waste Outreach Campaign – NHDES or if funded, the Trash Free Piscataqua Pet Waste Program) (RB=Research-based)** |
|  | **Objective** | **Partner Activities & Products** | **MS4 Responsibilities** | **Measurement** | **Anticipated Outcomes** | **Provider & Status** |
| **1** | ◾ (RB) Determine base line # of poop piles at a known site | ◾ ***Assessment:*** (RB) Develop assessment protocol and share with MS4s | ◾ (RB) Conduct assessment in spring – work with local animal control officer if there is one. | ◾ (RB) Re-assess # of poop piles. Yes/no results | Dog owners or walkers increase knowledge about amount of potential pet waste from area dogs could get into the water and the impacts from bacteria and increased nutrients to water quality. | NHDES and Every Drop |
| ◾ News readers **OR** water or tax bill recipients learn about pet waste issue | ◾ ***Webpage:*** Draft webpage or blog to link to◾ ***Press Release:*** Draft information article and bill insert with link to webpage or blog | ◾ Release article **OR** mail municipal bill insert◾ Count articles printed (maybe include readership?) **OR** count bills mailed | ◾ Count website or blog hits | NHDES and Every DropNHDES webpage provides Pet waste and water quality information.  |
| ◾ **OR** event attendees learn about pet waste issue. | ◾ ***Promo Materials:*** Package existing templates of tags and other materials from “The Inside Scoop” NHDES program. |  | ◾ Count materials distributed◾ Count website or blog hits |
| ◾ **OR** local Vet clients or rabies clinic or other pet related venue attendees learn about pet waste issue. | ◾ ***Promo Materials:*** Package existing templates of tags and other materials from “The Inside Scoop” NHDES program. | ◾ Distribute materials | ◾ Count materials distributed◾ Count website or blog hits |
| **2** | ◾ Dog license applicant & renewals learn about pet waste issue | ◾ Prep materials for MS4 agents to distribute at town/city halls **OR** local veterinarians | ◾ Distribute materials | ◾ Count how many dog owners received materials |  | NHDES and Every Drop Drafting website and information and pledge sheet.  |
| **3** | ◾ Residents learn about pet waste ordinance & fines (if any) | ◾ Provide MS4s with templates & guidance on ordinance & signage placement  | ◾ Develop signage & locate in key places (based on yr. 1 assessment or new problem spot) | ◾ Redo poop pile assessment from yr. 1. | Dog owners or walkers increase knowledge about financial incentives to pick up pet waste and pick up and dispose pet waste properly. | NHDES and Every Drop |
| **4** | ◾ Dog owners sign pledge to pick-up pet waste 90% of the time | ◾ Provide pledge sheet & training to clerks and on-line registration **OR** local veterinarians◾ Provide raffle suggestions for pledges | ◾ Support clerks to gather pledges | ◾ # of on-line pledges per town tracked by Every Drop and # of in-person pledges tracked by town. | Dog owners or walkers pick up and dispose pet waste properly and create norms around responsible pet waste behavior.  | NHDES and Every DropDrafting website and information and pledge sheet.  |
| **5** | ◾ Provide bag dispensers and collection cans at dog parks or frequented dog walking areas **OR** Redo any of above | ◾ Provide info on where to get materials and how to track. | ◾ ID hot spots or need and buy, install, and maintain equipment.  | ◾ # installed and amount collected in cans. | Dog walkers or dog park users collect and dispose of pet waste properly. | NHDES and Every Drop? |

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| **Message 3: Leaf and Yard Waste – P and N Impaired (RB=Research-based)** |
| **YR** | **Objective** | **Partner Activities & Products** | **MS4 Responsibilities** | **Measurement** | **Anticipated Outcomes** | **Provider & Status** |
| **1** | ◾ (RB) Determine base line # tons of yard waste at transfer station **OR** note any problem dumping areas near waterbodies. | ◾ ***Assessment:*** (RB) Develop assessment protocol and share with MS4s | ◾ (RB) Conduct assessment in fall for first year base-line |  | Residents increase knowledge about WQ impacts from yard waste dumping near or in waterbodies (increased nutrients, habitat loss, etc.) and how to dispose of yard waste properly, i.e., composting or bringing to transfer station.  | NROC? |
| ◾ News readers **OR** water or tax bill recipients learn about dumping yard waste and water quality issues.◾ ***Press Release or Bill Insert:*** Draft webpage to link to and draft information article and bill insert with link to webpage or blog | ◾ Release article **OR** mail municipal bill insert*(measures “reach”)* | ◾ Count articles printed (maybe include readership?) **OR** count bills mailed | ◾ Count website or blog hits  | NROC? |
| ◾ Targeted residents learn about dumping yard waste and water quality issues. | ◾ ***Door Hanger, Postcards or Flyers:*** Draft flyer or door hanger for distribution/mailing | ◾ Mail postcards/flyers or hang door hangers. | ◾ Count flyers distributed | NROC or NHDESDrafted flyer/door hanger with Dover input.  |
| **2** | ◾ More residents use transfer station for leaf and yard waste disposal.  | ◾ ***Signs:*** Design messages and messaging for transfer station signs | ◾ Purchase and place sign(s) at transfer station | ◾ Change in tonnage of leaf and yard waste at transfer station | More residents use the transfer station to dispose of leaf and yard waste resulting in decrease of leaf and yard waste dumping near or in waterbodies. | NROC? |
| **3** | ◾ More residents compost leaf and yard waste at home and away from waterbodies | ◾ ***Website:*** Draft and post blog/website informational content to link to◾ ***Press Release or mailer insert:*** Draft a press release with a link to blog/website **OR** use as a mailer insert **OR** other method or event to promote composting and proper use of compost.  | ◾ Count articles printed (maybe include readership?) **OR** count bills mailed | ◾ Count articles printed (maybe include readership?) **OR** count bills mailed◾ Change in tonnage of leaf and yard waste at transfer station | More residents understand the benefits to backyard composting and using compost PROPERLY and how to make and or buy and use a backyard compost bin.  | NROC |
| ◾ **OR** ***Workshop:*** host composting workshop with local garden club or UNH CE Master Gardeners | ◾ Provide information about Master Gardener workshop (if this exists) | ◾ # of workshop attendees |
| ◾ OR **Compost Bin Sale:** host compost bin sale (Use NRRA or other vendor)◾ ***Article:*** Release article **OR** mail municipal bill insert | ◾ Provide SOP where to buy compost bins and how to advertise (city of Nashua did this)*(measures “reach”)* | ◾ Count number of bins sold |
| **4** | ◾ Residents abutting waterbodies understand regulations or impacts regarding dumping of leaf and yard waste near or in waterbodies.  | ◾ ***Mailing:*** Draft targeted mailing template for waterbody abutters.◾ ***Signs:*** Draft signage text and SOP for posting near frequent dumping locations | ◾ Create waterbody abutter mailing list, edit mailing template, and mail notice◾ Purchase and place signs at dumping incident locations | *(measures “reach”)*◾ # of mailers and signs (if used)*(measures “impact”)*◾ decrease in # of dumping incidents  | Incidents of leaf and yard waste dumping near or in waterbodies are reduced.  | NROC? |
| **5** | ◾ Redo any of above? |  |  |  |  | NROC? |
| **OR** | ◾ Number of Professional landscapers and lawn care service providers raking, blowing or dumping yard waste into wetlands and drainage areas decreases.  | ◾ ***Landscaper Training:*** Modify Landscaping for WQ training to highlight the importance of avoiding the practice of raking, blowing or dumping yardwaste into wetlands or drainage areas.  | ◾ Host, participate in and/or promote 2 day training to local landscapers. ◾ Check UNH CE website for list of landscapers who attended.  | ◾ # of local landscapers attending training.◾ # of communities who participate in municipal panel at the training. | Landscapers adopt and promote more water quality friendly landscaping practices. The training also provides communities with an opportunity to present on their local WQ issues and landscaping regs or policies related to WQ.  | UNH CE, Sea Grant and NHDES SOAK |
| **OR** | ◾ Sweep fertilizer (and other pollutants) off sidewalks and dispose of them property to prevent pollutants from entering stormdrain systems.  | ◾ ***Stormdrain Stenciling:*** Coordinate stormdrain stenciling projects with communities and volunteers.  | ◾ Participate in stormdrain stenciling projects, e.g. help identify appropriate neighborhoods; provide stormdrain maps, safety cones, paint, and DEW assistance, etc. ◾ Help alert media attention to stenciling event and info. | ◾ # of participating volunteers, ◾ # of stormdrains stenciled | Stormdrain stenciling is a community-based activity that helps residents learn about the destination of stormwater in their neighborhoods. The activity creates an opportunity for observers to learn how materials on land can become water pollutants when they are carried into stormdrains. | UNH Sea Grant (others?) |

**CT NEMO** [**http://www.ct.gov/deep/cwp/view.asp?A=2718&Q=325364**](http://www.ct.gov/deep/cwp/view.asp?A=2718&Q=325364)

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| **Septic Systems – P Impaired and Bacteria or P TMDL (this may draw heavily on DES/NH Association of Haulers “Get Pumped” program if completed or EPA “Septic Smart” program if not) (RB=Research-based)** |
| **YR** | **Objective** | **Partner Activities & Products** | **MS4 Responsibilities** | **Measurement** | **Anticipated Outcomes** | **Provider & Status** |
| **1** | ◾ (RB) Determine baseline of septic system inspection requests◾ (RB) Develop SOP for identifying method to track septic system pump outs (using change in WW Tx plant tonnage from haulers from DES WW – Ray | ◾ Follow SOP and start tracking spread sheet  | ◾ Track tonnage hauled in their town/city through DES. *(measures “reach”)* |  | Residents increase knowledge about septic system maintenance and water quality impacts. Increased tonnage hauled from town recorded by DES. | NHDES and NH Association of Septage Haulers |
| ◾ News readers **O**R water or tax bill recipients learn about septic system maintenance, cost savings, and water quality issues.  | ◾ ***Webpage:*** NHDES and NHASH webpage and “Get Pumped” program information. ◾ ***Post Card and/or Press Release:*** Draft information article and bill insert with link to webpage or blog using DES “Get Pumped” program information.  | ◾ Mail post cards and release articles. Count articles printed (maybe include readership?) **OR** count bills mailed. | ◾ Count articles printed (maybe include readership?) **OR** count bills mailed◾ Count website or blog hits  | NHDES and NH Association of Septage Haulers (NHASH)Website release March 6, 2019. NHDES agreed to print flyers and/or post cards by summer.  |
| ◾ News readers **O**R water or tax bill recipients with septic systems pump their tanks.  |  ◾ ***Town Sponsored pumpout coupon:*** Town promotes “Get Pumped” website above and subsidizes pumpouts.  | ◾ Release articles leading to “Get Pumped” website and provide subsidized coupons for system pump outs.  | ◾ Count coupons used.  | NHDES and NH Association of Septage Haulers (NHASH)Website release March 6, 2019.  |
| **2** | ◾ Local cable access and on-line viewers see NHDES septic system videos | ◾ ***Videos:*** Coordinate with SNHPC on inserting questions after video. Provide videos and SOP on using them | ◾ Post on local cable access ◾ Track viewings | *(measures “reach”)*◾ # of viewers recorded | NHDES, EPA, and NH Association of Septage HaulersVideos created and on-line |
| **3** | ◾ Residents attend septic system care workshop | ◾ ***Workshop:*** Identify potential workshop presenters and draft agenda | ◾ Promote and host workshop. Could include incentive of several free inspections or pumpouts | ◾ # of attendees◾ # sign-up for free inspections or pumpouts if offered | NHDES, EPA, and NH Association of Septage Haulers |
| **4** | ◾ New home buyers (through realtors) understand where their septic systems are and how to maintain them | ◾ ***Realtor Kits:*** Develop realtor specific messaging materials and SOP for working with realtors. | ◾ Distribute materials to local realtors and contact to confirm interest in participation | ◾ # of participating realtors and/or materials distributed. | NHDES, EPA, and NH Association of Septage Haulers |
| **5** | ◾ Redo any of above? OR town/city adopts local pump our regulations.  | ◾ ***Pumpout Regulations:*** Create templates of local pump-out regulations and SOPs for adopting them.  | ◾ Work with town/city planners to write and adopt local pump out or related regulations. | ◾ Regulations passed | Increased tonnage hauled from town recorded by DES | NHDES, EPA, and NH Association of Septage Haulers |