When Legislators Don't Realize What They Voted On

Biosolids, Wood Ash & Paper Fiber in 2017

NEWEA ANNUAL CONFERENCE

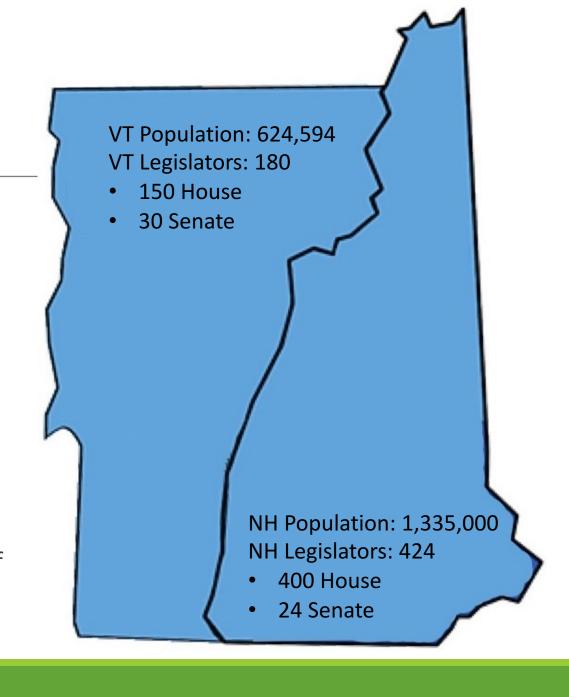
JANUARY 24, 2018
SHELAGH CONNELLY
RESOURCE MANAGEMENT, INC.



NH and VT

are nestled together and combined make up just under 2M people

- Combined oversight of 604 legislators who are earnestly trying to take care of their constituents
- They generally mean well. But often do not realize what some of the proposed bills mean, nor what unintended consequences may ensue as a result of their votes.



This presentation will look at examples of bills and legislative initiatives which were introduced in the 2017 session in both NH and VT relative to:

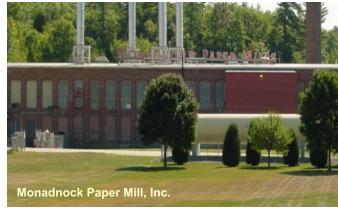
Biosolids

Wood Ash

Paper Fiber

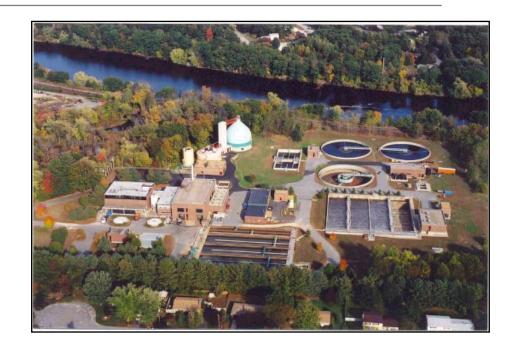






Biosolids from WWTFs

Wastewater treatment plants like this one in Nashua, NH clean wastewater so that it can be discharged into water bodies. The two products of this treatment are clean water and treated wastewater solids.



BIOSOLIDS are wastewater solids that have been treated and tested and meet strict federal and state standards for metals, reduction of pathogens, and vector attraction reduction.

Wood Ash from Biomass Power Plants

- The northeast has over 15 wood-fired biomass power plants
- Wood chips are brought to biomass plants to generate electricity or heat
- These power plants produce clean electricity
- Wood ash is a great source of potassium and lime
- Works well to neutralize odor causing compounds





Paper Fiber from Paper Mills

- Paper Mills installed WWTFs to manage the water that is used in their process
- Instead of Biosolids the mills generate a byproduct called Paper Fiber
- Paper Fiber provides lime and organic matter, and improves water holding capacity to resist drought. Paper Fiber can be recycled for many uses.
 - Soil Amendment
 - Animal Bedding
 - Engineered Topsoil
 - Landfill Closures









3 Residuals 2 States – All regulated differently but very successful recycling programs for the past 30+ years

Wood ash is the least regulated in both states

- Valuable in potassium fertilizer market organic approved
- High demand by farmers, compost facilities and topsoil purveyors

Biosolids have two-tiered product designation (Class A and B) and regulatory framework

- Class A has high demand and unrestricted distribution
- Class B has extensive site oversight and permitting requirements

Paper Fiber is technically a by-product of a WWTF at a papermill (paper sludge)

- NH classifies under the Class B biosolids site permitting requirements
- VT allows it to be managed more like wood ash or Class A biosolids

2017 was a busy year for NH + VT Legislatures

NH

- SB 129 dealing with Renewable Portfolio Standard (NH Timberland Owner Association)
- SB 51 study commission on RPS and economic impact for forestry and related industry
- SB 57 funding approval for delayed & deferred water infrastructure projects
- SB 121 committee to consider shifting NPDES permitting from EPA to DES
- SB 463/485 PFAS limits and Maximum Contaminant Level (MCL)
- HB 258 oops! Regarding subsurface sewage plans and grandfathered biosolids sites along designated rivers.....At least it was "germane" sort of....

VT

 H.211 a four part bill that jumbled lots of topics into one big mess including a directive "to develop a plan to reduce or phase out land application of sludge and septage"

SB 129 – Renewable Portfolio Standard

- Increases the price paid to 6 biomass power plants for their Renewable Energy Credits (RECs)
- Creates a three-year window with price stabilization to create a "bridge" forward
- Still need to find a long-term solution for ensuring viability of power plants
- Important outlet for low grade wood, and essential for supporting the \$1.4 billion forestry products industry
- 900 jobs and over \$250 million of economic activity each year statewide
- Became the genesis for SB 51 creating a study commission for the path forward

September 27, 2017 To the SB 51 RPS Study Committee:

The Value of RPS in NH

There are six wood-fired power plants (biomass plants) in New Hampshire that are important to New Hampshire's economy. They are located in Alexandria, Bethlehem, Bridgewater, Springfield, Tamworth and Whitefield. These plants burn wood chips and produce green, local electricity. Another thing they produce is **wood ash**, which comes from the combustion of wood chips – just like your home wood stove produces wood ash after burning wood. This wood ash "by-product" is a valuable fertilizer for farmers throughout New Hampshire.



It may not seem like a big deal to most people, but the wood ash from these biomass plants is a very important **locally produced natural fertilizer** which is used by hundreds of New Hampshire farmers annually. Farms have come to rely on the potassium and lime value from wood ash as a cornerstone to soil fertility and crop yields.



From loggers and foresters, to haulers and plant operators, these power plants account for over 900 jobs throughout our state and contribute \$250+ million dollars to the NH economy EVERY year. The benefits also include the tax dollars paid to towns, groceries and fuel purchased, community involvement and timberland management. Most importantly to me though, is the wood ash fertilizer that will no longer be available to farmers if these biomass plants shut down.

Why are these biomass power plants critical to the NH economy? 25 years ago the NH legislature "went green" and passed legislation to encourage the development of the biomass industry – this was a good decision for consumers, the timber and trucking industries, and farmers. Since then NH passed the Renewable Portfolio Standard (RPS) law

which enables biomass plants to sell renewable energy certificates (RECs) to cover their operating costs and remain viable. Recent changes in wholesale electricity markets coupled with changes in neighboring state RPS laws is putting these plants at risk of closure. Without a strong New Hampshire RPS, these power plants will have to shut down.

Losing these power plants would be terrible for New Hampshire. Hopefully this legislature will continue to champion jobs, especially in the North Country, by supporting the Repearable Portfolio Standard Elected.

by supporting the Renewable Portfolio Standard. Elected officials must focus attention on ways to keep these biomass plants operating and producing clean, local power for New Hampshire, and the added benefit of clean wood ash fertilizer for New Hampshire farmers.

Shelagh Connelly, President
Resource Management, Inc. (RMI)
*RMI recycles the wood ash for four of these power plants

Subject: SB 129 NHTOA biomass bill

As some of you have heard, on Tuesday at 12:01 AM Senate Bill 129 went into law.

This was a big undertaking as we faced stiff resistance from some powerful advocates. By working together, sticking to our talking points, and keeping our positive we were able to make it happen!

Our campaign for this bill started over a year ago with biomass and timber harvest briefing sessions with candidates for the N.H. Senate. The campaign als commissioning of a biomass economics analysis by Plymouth State University. And, most importantly our campaign included strong grassroots advocacy was attention of many lawmakers in Concord and set the stage for the next phase of this effort – finding a long-term sustainable solution for New Hampshire's industry and low-grade timber markets.

I want to personally thank all of you for taking the time to send letters, make calls, attend hearings, and testify on this important piece of legislation. Not o encounter an NHTOA member refusing to help out on this.

As the NHTOA works on the next phase of this effort, I will keep you informed.

Thanks again.

Jasen Stock

Executive Director

New Hampshire Timberland Owners Association

COMMITTEE TO STUDY SUBSIDIES FOR ENERGY PROJECTS PROVIDED BY THE RENEWABLE PORTFOLIO STANDARD

SB 51 - Chapter 81:1; Laws of 2017

AN ACT, ESTABLISHING A COMMITTEE TO REVIEW SUBSIDIES FOR ENERGY PROJECTS PROVIDED BY THE RENEWABLE PORTFOLIO STANDARD.

Final Report October 26th, 2017

Introduction:

The committee established by Senate Bill 51 to study subsidies for energy projects by the Renewable Portfolio Standard met in August, September and October of 2017 for a total of seven meetings. Minutes and materials from each of these meetings are included at the end of this document.

Members of the Committee:

Senator Kevin Avard (Chair) Senator Jeb Bradley Representative Douglas Thomas Representative Jaqueline Cali-Pitts Representative Herbert Vadney

Charge of the Committee and Organization:

The Committee was charged with reviewing subsidies for energy projects provided by the Renewable Portfolio Standard. Specifically, testimony was received relative to whether or not energy producers are able to provide energy without subsidies; subsidies should be enhanced, maintained, reduced, lowered or phased out; and whether it is in the public interest for the State to continue subsidies to protect ratepayers. The commission was also charged with monitoring dockets of the public utilities commission related to subsidies for energy projects.

From: NHMA Government Affairs [mailto:governmentaffairs@nhmunicipal.org]

Sent: Thursday, June 15, 2017 11:53 AM

To: NHMA Government Affairs < governmentaffairs@nhmunicipal.org>

Cc: Judy Silva <jsilva@nhmunicipal.org>; Cordell Johnston <<u>cjohnston@nhmunicipal.org</u>>; Barbara Reid <<u>breid@nhmunicipal.org</u>>

Subject: Bill Signing Ceremony for SB 57 (State Aid Grant Funding)

Importance: High

Good morning, NHMA members.

Since there may be little advance notice once this event gets schedule, I wanted to alert you to an upcoming event that we hope you will join us in.

NHMA has been notified by the Governor's Office that there will be a bill signing ceremony on SB 57, the bill appropriating monies to the state aid grant (SAG) program administered by the Department of Environmental Services. As of this time, no date or time has been set.

NHMA would like to have as many of our interested members available for this bill signing ceremony as possible. Please let me know of your level of interest in joining us for this event, and when the event get scheduled, NHMA will notify you immediately of date and time. The place will likely be the Executive Council chambers in the State House in Concord.

Thank you so much for all your grassroots support for this legislative initiative, and stay tuned.



Timothy Fortier Communications and Member Services Coordinator

SB 121 – NPDES Delegation from EPA to DES

From: Dean Peschel [mailto:dean_peschel@yahoo.com]

Sent: Wednesday, January 17, 2018 3:14 PM

To: bbelmore@somersworth.com; Mike Bezanson <michael.bezanson@rochesternh.net>; Blaine Cox <balance.cox@rochesternh.net>; Brian
bdeschaine@strathamnh.gov>; Terry Desmarais <tldesmarais@cityofportsmouth.com>; Dave Green <david.green@rochesternh.net>; Diane Hardy <dhardy@newmarketnh.gov>; jczyzowski@londonderrynh.org; Jennifer Perry <iperry@exeternh.gov>; knoyes@town.hampton.nh.us; mbobinsky@somersworth.com; Dennis McCarthy <dmccarthy@town.rye.nh.us>; Mike Carle <mcarle@town.hampton.nh.us>; papple@northhampton-nh.gov; panania@cityofportsmouth.com; Peter Goodwin <peter.goodwin@tedberrycompany.com>; Peter Rice <phrice@cityofportsmouth.com>; RickCantu@ospreyowl.com; Senator Andy Sanborn <SenatorSanborn@gmail.com>; Shelagh Connelly <shelagh.connelly@rmirecycles.com>; John Starkey <jmstarkey@seabrooknh.org>; Michael Trainque@hoyletanner.com
>; Glenn Tuttle <GRT@unh.edu</p>
; Steve Fournier (Newmarket) <sfournier@newmarketnh.gov>; Suzanne M. Woodland <smwoodland@cityofportsmouth.com>; Chris Jacobs (Hampton) <cjacobs@town.hampton.nh.us>

Subject: Fw: SB 450 Hearing Scheduled on Jan 30th

Hello everyone,

I wanted to share Dawn Tuomala'a email notice regarding the public hearing taking testimony on the proposed bill regarding NPDES delegation authority. Please consider offering written testimony or testimony in person if you can make the time to go to Concord and support the bill.

Dean Peschel Peschel Consulting LLC

---- Forwarded Message -----

From: Dawn Tuomala dtuomala@merrimacknh.gov

To: dean_peschel@vahoo.com <dean_peschel@vahoo.com>; i_storer@dover.nh.gov>; i_stanford@bedfordnh.org <i_foote@bedfordnh.org>; i_foote@bedfordnh.org>; i_foote@bedfordnh.org>;

Sent: Wednesday, January 17, 2018, 1:38:10 PM EST Subject: SB 450 Hearing Scheduled on Jan 30th

Good Afternoon,

FYI:The NPDES delegation bill, SB 450, has been scheduled for a hearing on January 30 @ 10:00 a.m. in Senate Energy and Natural Resources, State House room 103. We'd like to have a big turnout of support.

The Commission that was set up to work on the original SB 121, did vote to recommend additional study. Legislation has been submitted to create a formal committee and to authorize an expenditure to NHDES to hire a consultant. (2018-2863 SB Title: establishing an advisory commission for the department of environmental services relative to the delegation of MS-4 authority. Sponsors: (Prime) Jeb Bradley)

Please, send this out to other municipal representatives who are supportive of this bill to urge them to turn out at the Hearing and either testify in support or simply write a letter. Thanks.

http://www.gencourt.state.nh.us/bill_status/bill_docket.aspx?lsr=2863&sy=2018&sortoption=&txtsessionyear=2018&txtbillnumber=sb450&g=1

Dawn B. Tuomala, PE, LLS, CWS

HB 463/485 came out of nowhere...

- •Perfluorinated Compounds (PFCs) are a group of chemicals used to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water
- Can be found in products such as:
 - Water-repellent clothing
 - Furniture and rugs
 - Adhesives
 - Paint and Varnish
 - Food Packaging
 - Heat-resistant non-stick cooking surfaces

PFOA - perfluorooctanoic acid

PFOS - perfluorooctanesulfonic acid

Why and where are PFCs a concern?

- Some PFCs do not break down easily and can persist for a long time in the environment, especially in water
- Their toxicity and persistence in the environment means they are a potential danger to public health and the environment
- Hoosick Falls, NY Saint-Gobain Performance Plastics and Honeywell International have been identified as responsible parties
- Class B Fire Suppression Foam is another source

HB 463/485 PFAS limits

From: Ned Beecher [ned.beecher@nebiosolids.org]
Sent: Friday, June 23, 2017 4:10 PM
To: Christensen, Chris

Subject: Re: HB 463

Representative Christensen,

Thank you. I am sure you are exhausted as the rushed part of the session winds up. But I want you to know that we very much appreciated your work on the PFC issue and HB 463 (and 485) in particular. You and the other Representatives had to stand up to a lot of pressure on 463. Thanks for doing so. Your summary statement in the House Calendar was excellent - well reasoned.

I think it is the right thing for the state. Public health is being protected by DES & the 70 ppt standard. We now have more time to advance discussions and understanding. We know the issue will be back; that's fine. We'll be there earlier and stronger regarding 485 or whatever comes. Good science and thinking need to continue to prevail on this, or many positive programs could be disrupted at unnecessary cost to municipalities and others.

Thanks again. I've enjoyed our discussions. Have a great weekend.

Ned

Ned Beecher, Executive Director PO Box 422 Tamworth, NH 03886 603-323-7654 www.nebiosolids.org Recycled organics: Tools for sustainability.

HB 463/485 PFAS lowering limit from 70 ppt to 20 ppt

BIA was not alone in its opposition to HB 463. We were joined by the New Hampshire Municipal Association, New Hampshire Water Works Association, New Hampshire Water Pollution Control Association, North East Residuals & Biosolids Association, Granite State Rural Water, the town of Merrimack, and Emery & Garrett Groundwater Investigations. Like BIA, these groups and the highly qualified water quality scientists, engineers, and professionals they represent, recognized this legislation was premature, overreaching, and would result in an indeterminate financial burden to NHDES, municipalities, and NH businesses without a documentable corresponding benefit.

And the beat goes on in 2018 for PFAS...

All,

Just wanted to let you know that I have meetings scheduled with Rep. Hinch (tomorrow 1 pm, State House Room 313) re: HB 1101; Sen. Fuller Clark (Friday 8:30 @ BIA) re: SB 454 and with Sen. Innis (conference call @ 1 pm) re: SB 309. I still do not have the fiscal note associated with HB 485. There is an amendment on HB 1101 but it is not publically available. I am hopeful that it will be prior to the hearing on Jan 23rd. I'll follow up with you at the end of this week to let you know the outcome of the meetings and whether there are other bill amendments that we should be aware of.

Attached is the NHDES testimony for HB 1590 which I did not have at the time I sent the below email out.

HB 1101 FN Bill Docket Regulating groundwater pollution caused by polluting emissions in the air. Prime Sponsor: Richard Hinch Public Hearing: 01/23/2018 01:45 PM LOB 305, Executive Session: 01/30/2018 10:00 AM LOB 305 House Resources, Recreation & Development.

SB 309 FN Bill Docket Regulating groundwater pollution caused by polluting emissions in the air and relative to standards for emerging contaminants in drinking water. Prime Sponsor: Daniel Innis Hearing: 01/23/2018, Room 103, SH, 10:00 am Senate Energy & Natural Resources

SB 454 Bill Docket
Relative to ambient water quality standards and maximum contaminant levels for certain perfluorinated chemicals. Prime Sponsor: Martha Fuller Clark Hearing: 01/23/2018, Room 103, SH, 09:45 am Senate Energy & Natural Resources

HB 485 Bill Docket Relative to standards for emerging contaminants in drinking water. Prime Sponsor: Representative Mindi Messmer

Amendment: 2017-2512h

Stefanie

Stefanie Lamb
Vice President of Public Policy
Business & Industry Association | 122 North Main Street | Concord, NH 03301

Hearing Held January 11, 2018





Oops! Missed the deadline to file a bill... HB 258 to the rescue

"an act relative to the submission and approval of subsurface sewage disposal system plans...and authorizing certain septage and sludge land applications"

Back in 1998 the legislature grandfathered 13 farms to continue spreading biosolids within the corridors of "designated rivers" but the legislation required review and renew every 5 years by the legislature.

This review and renew has been granted 4 times and was due again by 1/1/2017.

Unfortunately a bill to trigger this renew was not filed and the grandfathered sites would lose their exemption for spreading

Solution was to find a sponsor who would allow us to piggy back on a "germane" bill

DES was very helpful and identified a plausible host bill and amended HB 258 to include the grandfathering language

And a helpful legislator took it a step further and made the grandfather status permanent!

Thus a happy ending to a situation that was in jeopardy of penalizing the farmers.



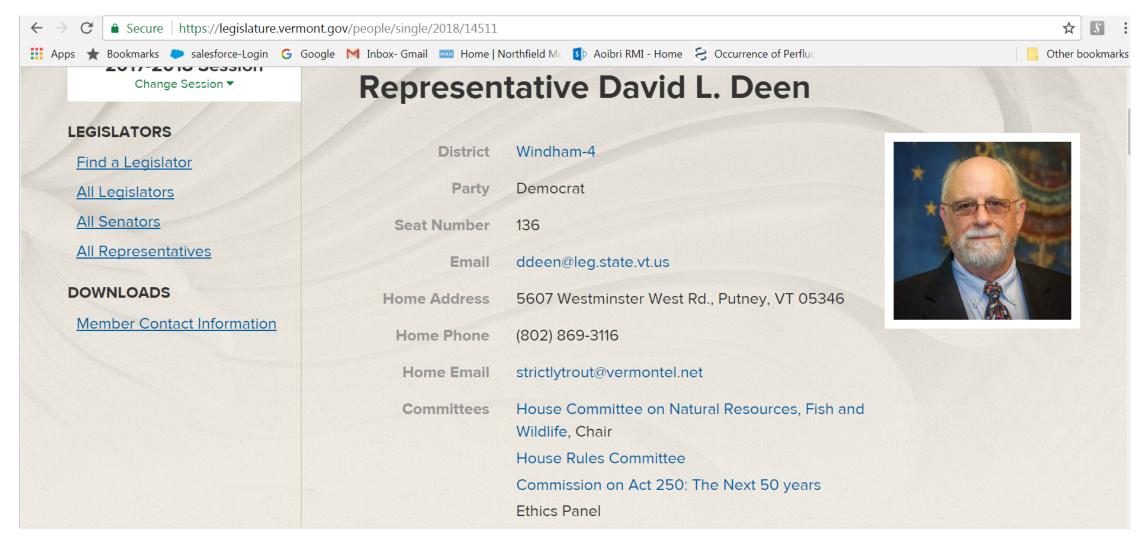
VT 211 Phase Out Land Application

Was a single bill with four different parts jumbled together and had the phrase "to develop a plan to reduce or phase out land application of sludge and septage" which legislators did not really seem to understand the implications for their own constituents.



1	H,211
2	Introduced by Representatives Deen of Westminster, McCullough of
3	Williston, Ode of Burlington, and Sullivan of Burlington
4	Referred to Committee on
5	Date:
6	Subject: Conservation and development; public water supply; water resources
7	Statement of purpose of bill as introduced: This bill proposes to require public
8	water systems to provide notice of drinking water quality violations. The bill
9	also requires monitoring of cyanobacteria outbreaks in the State to be
10	conducted between June 1 and November 1 annually. The bill requires
11	pollution abatement facilities to implement electronic or automatic reporting.
12	In addition, the bill would require the Secretary of Natural Resources to submit
13	to the General Assembly a strategy for reducing the land application of septage
14	and sludge in the State.

Representative from Putney, VT



Paper mill generates 35,000 tons of paper fiber annually





Management	Benefits	Risks
	WWTF = wastewater treatment facility;	GHG = greenhouse gas
Landfill Sludge	Electrical power generation via landfill methane capture Only disposal option for WWTFs that do not treat sludge to biosolids standards and a contingency option for WWTFs that do	Increases landfill methane (GHG) emissions Reduces landfill space capacity Increased vehicle emissions/GHGs from hauling Increases generation of landfill leachate –disposed at WWTFs where partial treatment increases pollutant loading in discharge to surface waters
Land Application Biosolids & Stabilized Septage	Provides essential macro and micro plant nutrients, i.e., fertilizer Recycles carbon and nutrients to soil Builds soil organic matter, increasing soil water holding capacity & flood resiliency while reducing soil erosion potential Enhances soil microbial population Sequesters/stores carbon and GHGs in soil Land restoration tool Conserves landfill capacity Requires permit - siting prohibitions, isolation distances, public access and site use restrictions, soil & groundwater monitoring EQ biosolids: pathogens further reduced to level at which material is no longer regulated	Potential for nutrient runoff or leaching to water resources (similar to any fertilizer) Pathogens reduced, not eliminated Potential for odor complaints Public perception challenges Concentration of nutrients on agriculture fields Emerging contaminants present in material
Septage disposal at WWTF	Provides disposal option (during all seasons) WWTF's charge receiving fee which offsets operating costs	WWTFs have limited capacity (organic load) ~ 30% of WWTFs capable of receiving septage Increased vehicle emissions/GHGs from hauling
Septage land application	Relieves pressure on WWTF treatment capacity (~10-20% of 50 M gallons, annually) Reduces hauling distances/vehicle emissions Allowed for residential septage only	Potential for non-biodegradables to pass screening Similar risks for all land application
	Definitions	
Biosolids: treat	separated during the treatment of municipal wasteward and sewage sludge that meets the EPA pollutant and polids meeting VT metals limits, pathogens significantly	athogen requirements for land application

EQ: exceptional quality biosolids that meet VT metals limits, pathogens further reduced and vector attraction reduced such that material is not classified as a solid waste and may be marketed and distributed to the public

Septage: partially treated sludge that is accumulated and stored in a septic tank

Stabilized Septage: treated with lime to raise pH and destroy pathogens and reduce vector attraction

Staples for Success

- IMPORTANT TO STAY ENGAGED WITH OUR ELECTED REPRESENTATIVES AT THE LOCAL, STATE AND FEDERAL LEVEL
- WORK WITH STATE MEMBER ORGANIZATIONS
 - NHWPCA
 - GMWEA
- CONTINUE HOSTING ANNUAL WATER'S WORTH IT! LEGISLATIVE EVENTS
- ATTEND THE NATIONAL FLY-IN WITH NEWEA
- COLLABORATE WITH NEBRA NED





Thank you for your time!

Questions?

NEWEA ANNUAL CONFERENCE

JANUARY 24, 2018

SHELAGH CONNELLY

RESOURCE MANAGEMENT, INC.