Sassafras Update

Sassafras River Association
PO Box 333
Georgetown, MD 21930

February 2010

SWAP STAKEHOLDERS: TURNING THE PLAN INTO ACTION

More then 100 stakeholders gathered at the Galena Fire Hall on Tuesday evening to receive a copy of the SWAP Executive Summary and listen to SRA staff outline the necessary steps to turn the completed plan into action. Ken Staver, Research Associate at Wye Research Center, provided the keynote, discussing nutrient movement in the ecosystem. Dr. Staver provided insights on the relationship between temperature, water volume and run-off. Run-off from cropland and impervious surfaces, such as roads and roofs, contribute significant amounts of nutrients to the Bay and its tributaries every year.

Kascie Herron and Josh Thompson highlighted restoration efforts currently underway. SRA efforts in 2010 include incentives to increase participation in cost share programs, septic testing for homeowners in the critical area, free soil testing, as well as workshops focused on lawn care, rain barrels, and rain gardens. Other efforts target the watershed's youth, promoting stewardship and responsible recreation. Expanded water quality monitoring and a Sassafras River Report Card are also in progress. SWAP recommendations can be found on SRA's website.

Wye Research Associate, Dr. Ken Staver.
Photo courtesy Frank Coleman

Watershed Events

Check out our website for complete details.

- **Lawn Care Workshop** March 27, Granary Restaurant, 10 am – noon
- **Project Clean Stream** April 10, 9 am—noon, multiple locations. Trash pick up throughout the watershed. Call 410-708-3303 to volunteer.
- **Earth Day and Mutt Strutt**, Chestertown, Fountain Park, April 24, 9 am—1 pm.
- **Sassafest, SRA's first River Awareness Day**. July 17th, 11 am - 4pm Betterton Beach.

SRA Joins AFT BMP Challenge

American Farmland Trust (AFT) has invited SRA to join its BMP Challenge project Advisory Board. The BMP Challenge project offers farmers a no-risk opportunity for implementing practices aimed at nutrient reduction. AFT has teamed up with SRA, University of MD Extension, Kent and Cecil Soil Conservation Districts, local crop consultants, and local farmers to offer the missing link in BMP implementation. The BMP Challenge offers producers the opportunity to try a new nutrient efficient strategy or technology without financial risk.

SRA is working closely with AET consultant, Don Moore, and the local SCD offices to locate several grain farmers in the Sassafras watershed who would be interested in participating. Eligible farmers elect one of two strategies targeting more efficient nitrogen (N) use, including a 15% flat N reduction and use of an Aerway or Turbo-till vertical tillage implement over no-till ground to incorporate manure. In both cases, technical assistance is provided by a certified crop consultant to assure proper implementation, adjustment of the Nutrient Management Plan, and guidance throughout the growing season. As part of the program, a check strip is planted utilizing normal agronomic practices, which is then compared to strips directly adjacent to the check at harvest to identify any yield variations. If a yield loss is identified, AFT compensates the farmer for the loss.

It is hoped that through this program, a growing number of farmers will have solid, production scale evidence sufficient to justify continued use of the practices as well as a federal insurance-like product to mitigate against yield loss. While the number of BMPs offered in the Sassafras watershed is limited, as the program achieves success and gains support, a wider suite of practices should made available to a larger number of participants. The program began in Pennsylvania and will move to Virginia where practices such as removal of phosphorus from the starter fertilizer are being offered. As members of the Advisory Committee, SRA will continue its work to cultivate and ensure a healthy and sustainable agriculture industry combined with stewardship of the land and water based on sound science.

J. Thompson

Free Soil Tests and Lawncare Workshop

Why pay for lawn fertilizer that you may not need? Soil testing is the first step towards a greener, healthier lawn. SRA is offering free soil tests to all watershed residents. Stop by the SRA office and pick up a test kit any weekday. Pick 10 sites on your lawn, using a clean trowel scrape back the thatch, dig a 2" x 5" sample and place in a clean bucket. Mix samples together, then scoop and fill cloth soil bag, using the plastic liner. Drop off your soil test to SRA on or before **March 3rd**. There will be a pail outside the door for soil test pick up and drop off.

Samples must be received by **March 3rd** for results to be processed before the March 27th workshop. The **March 27th** Workshop takes place at the Granary Restaurant, 10 am to noon. Karen Gartley from UDEL Soil Testing Lab will be on hand to discuss results and answer any questions. Master Gardener, Sabine Harvey will offer tips on composting and green gardening. For more information contact Josh at 410-708-7667.

WATERKEEPER® ALLIANCE MEMBER

Sassafras RIVERKEEPER'S® COVE

Concerns or Questions?
The **RIVERKEEPER®** can be reached at
(410) 708-3303 or
Riverkeeper@sassafrasriver.org

Snow Fall, Road Salt and Water Quality

With winter comes the usual snowfall: that yearly nuisance we deal with on the morning commute, but don't really remember once spring arrives. I think we can all agree that unlike winters in past years, the negative affects of our record accumulations this year will not be easily forgotten.

After a bit of research I learned some startling facts about snow fall, the use of salt on our roads and the affects this practice has on water quality. Using salt on our roads is a relatively new technique at combating snow and ice. Before the 1970s sand was primarily spread, but in the past thirty years salt use has increased to almost 20 million tons per year nationwide. Although there aren't exact numbers for the total amount of road salt used in the Chesapeake Bay region, Tom Schueler from the Center for Watershed Protection estimates about 2.5 million tons are applied each year. To think of this visually, if all of this salt were put into a container of fresh water, it would create over 15 billion gallons of seawater. The Chesapeake Bay in its entirety contains about 250 million tons of chloride (salt) at any given time. This salt content is the main reason why the surface of the Chesapeake Bay does not typically freeze over in the winter, and will never freeze completely.

Snow Clean Up in Georgetown

This disproportionate level of salt can have severe consequences for the health of our freshwater systems. Salt is extremely soluble in water and can move through both surface and groundwater fairly easily as it makes its way to the Sassafras River and Chesapeake Bay. Schueler states that "road salting is thought to be the primary source of chlorides to streams and rivers of the Bay." In fact, some of the highest recorded chloride levels are in snow melted runoff near major highways and snow piles in parking lots. A Washington Post article from February 23rd 2010, reported that "a heavy influx of sodium and chloride—which is what you get when salt dissolves— will disrupt the ability of freshwater organisms to regulate how fluid passes in and out of their bodies."

Road salt itself contains other pollutants such as phosphorus, nitrogen, copper and even cyanide. Cyanide can be very harmful to humans and aquatic life. This is why during a snow melt, pollutant concentrations in storm water runoff are some of the highest seen all year. High salt levels have even been found in soils as far as 100 feet from major highways. Many trees, shrubs and ground cover species are sensitive to high salt levels in soil and may be killed or fail to germinate with excessive salt exposure. One highway report stated that "as many as ten percent of trees found along road corridors have been harmed by road salt."

So what can you do? Use calcium chloride versus sodium chloride (also known as rock salt.) Calcium chloride has no cyanide, and you need a much lower dose per yard then sodium chloride.

Excessive road salt can also cause serious damage to human infrastructure such as bridges, decks, as well as metal surfaces due to corrosion. Infrastructure can also be severely damaged by the weight of large snowfalls. On Friday, February 12th, a shed at Georgetown Yacht Basin collapsed under the weight of almost four feet of snow. Although there was much clean up required, just eight boats were damaged by the fall and all contaminants were contained on site. On the Bohemia River a shed collapsed, but damaged over thirty boats. I don't think I will be alone when I welcome spring with open arms!

See you on the Sass,

Kascie Herron

Sassafras RIVERKEEPER®

Sassafras Sampler Training Dates

In last month's issue we described what was in store for this year's water quality monitoring program. If you are interested in participating in this effort and monitoring a non-tidal stream site, once a month for the upcoming year, you will need to sign up for one of our training sessions. These trainings will be administered by professional chemical analysts from LaMotte Company, and will focus on how to use equipment both in the field and back at home. The dates of the trainings are Saturday, **March 13th** and Saturday, **March 27th**. Trainings run from 9:00 AM until noon and are held at Washington College's Toll Science Building on Campus Avenue in Chestertown. You only need to sign up for one training, so if you are interested please contact me at 410-708-3303. Make a difference and join us today!