

"The Chinese use two brush strokes to write the word 'crisis.' One brush stroke stands for danger, the other for opportunity. In a crisis be aware of the danger, but recognize the opportunity."

~ John F. Kennedy

*From the Director
Patricia K. Harris*

Opportunities in the midst of crisis...

We can all agree 2009 has been a year of crisis and challenges for our programs. But as I've learned from you, the Soil & Water Conservation Partnership, 2009 continues to be.....

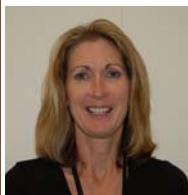
the year of opportunities

- ◆ Congratulations to the Johnston Soil & Water Conservation District for developing an outstanding high school Envirothon program, and for introducing us to the "Sequoias," first runner-up of the 2009 national Canon Envirothon. Every district should seize the opportunity to engage and challenge students to become more environmentally aware through *educational programs*.
- ◆ Despite economic challenges, this update highlights the partnership's continued success at securing *grant opportunities* to meet conservation needs ranging from the Leadership Initiative and watershed protection projects, to implementation of innovative animal waste management technologies and irrigation efficiency practices.
- ◆ North Carolina was selected by the National Association of State Conservation Agencies to pilot and develop a sustainable, statewide, comprehensive *training and certification program* for district employees. This program will foster the highest levels of professionalism, customer service and program delivery. More later on this opportunity....
- ◆ The division has been actively involved in the development of the Department of Environment and Natural Resources' (DENR) *Climate Change Strategy*, particularly in the areas of mitigation strategies (e.g. green energy development, carbon sequestration) and adaptation strategies (e.g. protection of agricultural lands, promoting BMPs to buffer against impacts of climate change-related flooding and drought risks).
- ◆ The 2010 *annual state meeting* Jan. 3-5 at the new downtown Raleigh Convention and Marriott City Center is an opportunity to lend your voice and efforts to the partnership (more on p. 3).

This new fiscal year will continue to deliver *crises* under the guise of increasing environmental pressures, decreasing resources and demanding workloads. I believe the biggest challenge ahead is to maintain adequate technical assistance funding for program delivery. I also believe success and support will only happen if we instill the value of soil and water conservation in our youth, landowners, government officials and residents, and above all, we must recognize and seize the opportunities.

~ Pat Harris can be reached at (919)-715-6097 or Pat.Harris@ncdenr.gov

Please welcome our newest staff members



Susan Dadich
Administrative Assistant
Division of Soil & Water Conservation

Susan joined the division January 5, 2009. She previously worked with IBM for 22 years and Lenovo for three years. Her responsibilities include assisting the division director, Pat Harris, human resources and benefits, fixed assets, e-Procurement, motor fleet invoices and other tasks. Welcome, Susan!



Tom Hill
Nonpoint Source Planning Coordinator
Division of Soil & Water Conservation

Tom Hill joined the division July 27, 2009. He previously worked with the Wake Soil and Water Conservation District as a natural resource conservationist. Tom is currently working with watershed planning and writing and administering grants for the division. Welcome, Tom!

Soil & Water Conservation Commission Report

The N.C. Soil and Water Conservation Commission (Commission) has been busy addressing important issues in recent months to include planning for a tight supervisor 2009-10 travel budget, and discussing measures to correct cost share contract compliance issues. Acting chair and Polk County supervisor Richard Smith, and the entire commission, are doing an excellent job.

Supervisor Travel

Anticipating a budget shortfall this year, the commission adopted guiding principles during their July meeting to be used when making decisions regarding reimbursement for supervisor travel. These principles place top priority on monthly soil and water conservation district meetings, supervisor training at the University of North Carolina School of Government, and commission meetings. The projected shortfall for fiscal year 2009-10 between the amount needed to fully fund supervisor travel, and the available budget, is nearly \$16,000. To eliminate the shortfall, the commission considered several options before following the recommendation of the Association Executive Committee. For all monthly board meetings supervisor travel will be reduced by \$7.75, the value assigned to breakfast. This option allows meetings and training to be conducted as usual with the least amount of impact.



Commission Members (1 to r): William Pickett Jr., Donald Cox, Manley West, Bobby Stanley, Richard Smith, James Ferguson

Commission Cost Share Committee Formed

At the September meeting, the commissioners agreed to form a cost share committee to investigate several issues involving allocation of cost share resources. Since it is essential to have reasonable processes in place to ensure all contract parties are held responsible and accountable for public funds managed through cost share programs, the committee will also consider the implementation of additional measures. Commission members will serve on the committee along with representatives from the division, Natural Resources Conservation Service, and the District Employees Association.

New Policy: Non-Compliance with Maintenance Requirements

Concern has been expressed over inconsistencies between districts regarding how many times a cooperator can be found non-compliant with cost share maintenance requirements before being asked to repay cost share funds. Some districts allow cooperators to go out of compliance multiple times without asking for repayment. Consequently, a cooperator may only comply with the maintenance obligations for a small portion of the contracted period. Inconsistencies undermine the ability of districts to hold all cooperators accountable for maintaining practices installed with public cost share assistance.

To address this concern, the commission adopted a policy at the Sept. 16 meeting, clarifying the number of times a cooperator may be out of compliance with contract requirements before repayment of cost share funds or incentives is required.

This policy applies to all cost share programs under the commission's authority

For cost share practices:

- ◆ First time out of compliance: district sends certified mail to cooperator within 30 calendar days containing notification to correct non-compliance within 30 calendar days from date of letter or repay a prorated amount of contracted funds (reasonable consideration given for vegetation reestablishment up to 12 months.)
- ◆ If cooperator restored compliance, but is found out of compliance a second time, the district must require the cooperator to repay prorated funds.

For incentive practices:

- ◆ First time out-of-compliance: districts require 100 percent repayment of funds unless the cooperator failed to achieve compliance despite good faith efforts.



Jennie Wilhelm Hauser is the new legal counsel to the commission. In addition to her work at the N.C. Department of Justice, she serves as chief to DENR's Administrative Section which provides legal support to all its commissions, collections program and personnel.

Congratulations to NCASWCD, Districts and Division Staff

As a direct result of ongoing district and division staff efforts, and continued support from the N.C. Association of Soil & Water Conservation Districts (NCASWCD) and other partners, environmental awareness among North Carolina students continues to grow as evidenced by Johnston County Soil & Water Conservation District's Envirothon team. The "Sequoias" placed first this year in the state event and 2nd out of 54 teams at the national Canon Envirothon in August. One team member, Frankie Johnson, also participated in this year's Resource Conservation Workshop (RCW) at NCSU, where she earned the Grady Lane and RCW scholarships as well as cash awards. The N.C. Envirothon Host Core Committee worked hard to ensure this event will be remembered by the hundreds of participants who traveled to North Carolina from across the nation and Canada. Thank you to district and division staff who served on the committee along with co-chair and supervisor Bruce Miller. Thank you also to the many volunteers in DENR and the soil and water conservation community who contributed to this outstanding educational program.



District Employees Workshop

The 2009 District Employees Workshop (DEW) was held in Statesville at the Holiday Inn and Iredell Agriculture Center Aug. 18-20. The division organized the event, and arranged training for approximately 150 participants in agricultural conservation planning, the Community Conservation Assistance Program, district law and operations, conservation easements, Food, Land and People, and Project Learning Tree-Forests of the World. One Virginia district and 54 North Carolina districts were represented. Thank you for supporting staff training during a tight budget year! The 2010 workshop will be held in western North Carolina. Please e-mail suggestions or ideas for next year's District Employees Workshop to Davis Ferguson at davis.ferguson@ncdenr.gov.



Leadership Initiative

The Leadership Initiative's inaugural program began in September 2009 with 19 supervisors participating. The program provides the division, as coordinating agency, a way to help meet supervisor training needs. The program spans three sessions that have been totally funded by a grant from the Altria Group, Inc. The first session focused on emerging environmental/natural resources/agricultural issues facing North Carolina and local districts. Speakers represented academia, production agriculture, state government, the environmental community and districts, each offering different perspectives on the issues presented. A second session, planned for the spring of 2010, will focus on the internal workings of NCASWCD and the commission, with the third and final session in late summer of 2010 focusing on how to be an effective leader. The N.C. Foundation for Soil and Water Conservation secured the Altria grant.

Working Lands Initiative

The Working Lands Preservation Resource Manual was released at this year's DEW, with a copy presented to Cecil Settle by Jerry Dorsett and Michelle Lovejoy at the September commission meeting. The N.C. Foundation for Soil & Water Conservation obtained a 2008 grant from the Altria Group that funded the manual as well as grant writing and conservation easement workshops. The Tobacco Trust Fund, through the Conservation Trust for North Carolina, is funding the Community Conservation Working Lands subcommittee to develop guidance and tools for monitoring funds, legal assistance and template documents. Funding will also be used for a workshop training track and regional fall/winter 2009 technical trainings.



Annual State Meeting

You are invited to join us at the upcoming annual state meeting. The theme this year is "Focus on Water—Quality & Quantity." Please make plans to join us Jan. 3-5 at the new downtown Raleigh Convention Center. Lodging will be at the adjacent Raleigh Marriott City Center Hotel with information and meeting registration available at <http://portal.ncdenr.org/web/swc/2010annualmeeting>.

~Dick Fowler, District Outreach Coordinator 919-715-6104
Dick.Fowler@ncdenr.gov

~Michelle Lovejoy, Area Coordinator 336-771-5052
Michelle.Lovejoy@ncdenr.gov

Controlled Drainage

Conservation Innovation Grant Project

The division still has funding available to install water control structures on tile drains through a conservation innovation grant in cooperation with the NCSU Biological and Agricultural Engineering Department (NCSU-BAE). To date, structures have been either installed or funds have been awarded to install structures on eight farms in Pitt, Wayne, Perquimans and Columbus counties. The division would like to work with 3-4 additional districts to install structures on 8-10 additional farms in the middle coastal plain region. Controlled drainage offers farmers the capability to protect water quality and manage soil moisture thereby improving yields, especially during times of short-term drought stress. Districts wishing to participate in the project, or who have questions, should call David Williams. The division is cooperating with NCSU-BAE to conduct a controlled drainage field day in Greenville on Dec. 14. In addition, the division encourages all farmers with water control structures, to work with NCSU-BAE to evaluate new decision support tools to assist farmers to more effectively manage controlled drainage systems to improve water quality and crop yield.

Mortality Management

Conservation Innovation Grant Project

The division has a contract with Natural Resources Conservation Service to install innovative mortality management systems on up to four farms. Two swine farms, in Johnston and Sampson counties, installed rotary compost systems (the Biovator) to manage mortalities. This new technology shows excellent results in initial demonstrations, and farmers are pleased with the operation savings compared with a mortality incinerator. The division also contracted with a poultry producer in Alexander County to install a forced aeration compost system using pre-fabricated concrete materials, instead of the pour-in-place methods previously employed. It is hoped that this approach will significantly lower the cost of this technology. The division is still looking for another dairy, beef or swine farm on which to install a mortality gasification system.

~ David Williams (919) 715-6103
David.Williams@ncdenr.gov

CREP Enrollments up on Pasture Operations

Interest in the Conservation Reserve Enhancement Program (CREP) is increasing, especially in the Piedmont counties. These enrollments are particularly exciting because historically, CREP has worked with row crop farms. Now, we are working with more pasture operations by establishing buffers and requiring cattle exclusion. With the continued support of local partners, we are looking forward to what the upcoming year can bring to CREP. Please note the following reminders:

- ◆ A revised CREP State Form (rev 8/31/09) was posted both to the listserv and the division's web site. Please ensure the correct form is used.
- ◆ CREP Earmark Cost Share is being done differently this year. Do not hold CREP Agriculture Cost Share Program contracts approved by the Farm Services Agency since they are now on a first-come, first-served basis.

Be aware of the FSA cost share caps in the components below (2-CRP Paragraph 483). These caps may not cover the 50 percent cost share that FSA normally provides for CREP contracts.

FSA Cost Share Caps

Total of all water developments	\$3,000
Total of all water facilities per contract	\$2,000
Total of all pipelines	\$2,000
Total of all livestock crossings per contract	\$1,500

- ◆ If you encounter a contract that would exceed these limitations, contact Natalie Woolard and/or your CREP specialist immediately for assistance, and to review the calculations before submitting contracts to the Agriculture Cost Share Program. Additional documentation may be required for the program to cover shortages.
- ◆ Continue coordinating site visits with all local agency staff. Using this method, everyone understands the landowner's objectives and what qualifies, and it ensures quality customer service throughout the contracting process.

If you have questions or would like information on how CREP can be used in your county, please contact Natalie Woolard or the CREP specialists in your area.

~ Natalie Woolard (252)-948-3902
Natalie.Woolard@ncdenr.gov

Agriculture Cost Share Program
Michelle Raquet, Program Manager

Program year 2009 was quite a challenge. More than 2,400 contracts were entered into the cost share database with approximately 52,000 recorded since the program began in 1984. For program year 2010, several contract forms were revised. As part of the application process, applicants must authorize the release of United States Department of Agriculture records and acknowledge this information is subject to the North Carolina Public Records Law. Language was also added to communicate that the cost share amount is contingent upon appropriations, allocation, and the availability of funds from DENR. These statements must be included in all state contracts. The addition of these statements is meant to protect all parties involved, not to deter participation in the cost share programs.

Please continue providing input on funding needs and program improvements. This year, the manual will be updated, web site changes made to enable quicker posting of manual updates and other items, and work on the on-line contracting system will continue. To participate in any of these projects, please contact your cost share specialist. *~Michelle Raquet (919) 715-6101 or Michelle.Raquet@ncdenr.gov*

Changes to ACSP Practices for 2010

- ◆ Modified the policies associated with Stream Protection Systems. The policy clarifies that applicants who have already excluded livestock from a stream may still be eligible for cost share assistance to install other components of a stream protection system (i.e., installing or enhancing the water supply, installing additional HUA, prescribed grazing) if the components would enhance the water quality protection of the current system.
- ◆ Revised average costs for gasification units, poultry litter spreaders (waste application equipment) and in-line water control structures, and forced aeration composting systems.
- ◆ Modified the Nutrient Scavenger Crop best management practice to make it an annual BMP.
- ◆ Modified the Conservation Irrigation Conversion practice to provide up to \$250 per acre to assist producers using traveling gun irrigation systems to convert to center pivot or lateral move systems with low pressure or drop nozzles. The cap for this practice was also lowered to \$15,000.
- ◆ Added Crop Residue Management as an Erosion/Nutrient Management BMP. At its September meeting, the commission clarified that the 60 percent cover requirement is to be measured after planting.
- ◆ Modified the Prescribed Grazing Incentive to allow up to 30 percent imported feed.

Drought Project

Thank you!



Practice	Goal	Planned	Implemented
Pasture Renovation	9,000 ac.	19,819 ac.	13,738 ac.
Wells	350	555	356
Ponds	125	142	96
Conservation Irrigation		413,980 ft.	163,307 ft.
No. of Contracts		1,960	1,293
Total \$		\$8,065,679	\$4,630,856

The division and local districts have received considerable praise for managing the drought response project. We should all be proud of the accomplishments summarized in this table. The project successfully demonstrated the capability of districts to deliver a water quantity and water conservation cost share program. This project also resulted in many new clients learning about the services available from soil and water conservation districts. Thank you for your hard work on this important project.

Jordan Lake Nutrient Strategy Rules Approved

The Jordan Lake rules were approved by the General Assembly and are now effective. This strategy has reduction targets based on subwatershed, and reductions are compared to the baseline loading average per year from 1997-2001:

- ◆ *Haw* subwatershed: 8 percent nitrogen reduction, 5 percent phosphorus reduction
- ◆ *Upper New Hope* subwatershed: 35 percent nitrogen reduction, 5 percent phosphorus reduction
- ◆ *Lower New Hope* subwatershed: no increases in nitrogen or phosphorus loading from baseline

The division will continue to work with affected districts and the N.C. Division of Water Quality to implement the agriculture rule. The Jordan rules can be accessed through the Division of Water Quality's web site: <http://h2o.enr.state.nc.us/nps/JordanNutrientStrategy.htm>.

Watershed Projects
Julie Henshaw
Program Manager
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CCAP Begins Third Year

Thanks to district efforts, the Community Conservation Assistance Program (CCAP) successfully completed its second program year! During program year 2009, 139 contracts were received bringing program totals to more than \$900,000 encumbered and \$300,000 spent on completed projects. Popular best management practices included: cisterns, well closures, bioretention areas, stormwater wetlands and stream restoration projects. The CCAP Advisory Committee has been reviewing new BMPs and making policy recommendations to the commission.

New BMPs

- ◆ marsh sill
- ◆ compost socks
- ◆ blankets for critical area plantings



marsh sill

The marsh sill BMP was successfully added to the program due to a partnership with the N.C. Coastal Federation and the state Division of Coastal Management. This BMP is a structure built parallel to the coast to reduce wave action, decrease shoreline erosion and protect the existing marsh.

We are continuing to improve the technical assistance and job approval authority (JAA) process. To date, 34 district employees have received some form of CCAP JAA. This year, the District Employees Workshop included CCAP training on rain gardens, wetlands, streambank protection, cisterns, and the new water quality benefits tool. Look for CCAP 101 and JAA training this fall! As always, please continue providing input on program improvements. We want to hear from you! A total of \$740,000 was allocated to 68 districts for program year 2010 and we look forward to a productive year three!

~Shelly Baird, Program Coordinator
(919) 715-6110 Shelly.Baird@ncdenr.gov

Neuse and Tar-Pamlico Nutrient Sensitive Waters Strategy

Local advisory committees and basin oversight committees documented progress on the Agriculture Rule for crop year 2008. Agriculture collectively achieved a reduction in nitrogen loss as follows, with no net increase in phosphorus:

- ◆ 41 percent in the Neuse River Basin
- ◆ 50 percent in the Tar-Pamlico River Basin

DWQ Proposing Falls Lake Nutrient Strategy Rules

The N.C. Division of Water Quality (DWQ) is developing a nutrient management strategy for the Falls Lake Watershed through a stakeholder process. Stakeholder meetings, including an agriculture workgroup, will be held this fall. All affected districts are encouraged to participate in the rule development process. The proposed reductions are significant, and are in addition to work done through the existing Neuse rules with a baseline of 2006.

The division received a new 319 grant to continue supporting river basin technicians in the Neuse and Tar-Pamlico river basins!

~Kelly Ibrahim, Program Coordinator
(919) 715-9631 Kelly.Ibrahim@ncdenr.gov

Watershed Grant Projects

Districts are moving forward with implementing grant projects in the *Dan River Watershed* (319 funded) and the *French Broad River Basin* (Clean Water Management Trust Fund). Stokes SWCD hosted a site visit for the Environmental Protection Agency and the DWQ 319 staff on Sept. 14 to highlight the success of the Dan River Watershed Project.

Grant Opportunities

Despite the economic downturn, there are funding sources available for district projects. Please call Tom Hill, the new NPS planning coordinator for assistance with identifying needs, developing proposals, and finding resources. Below is an update on the status of three of our main funding partners.

—Clean Water Management Trust fund (CWMTF)

Traditionally, applications are due following the first week in February. It is anticipated much of the 2010 budget of \$50 million will go toward contracts awarded last year but put on hold due to the budget emergency during 2009. More information at: <http://www.cwmtf.net>

—North Carolina Agricultural Development and Farmland Preservation Trust Fund (NC ADFP)

NC ADFP received half of the 2009 budget for fiscal year 2010. This year's \$2 million budget will likely be divided similarly to years past, roughly one-third of the funds for planning, one-third for projects, and one-third for easements. More information is available at: <http://www.ncadfp.org/ADFPTrustFundWebpage.htm>

—EPA 319 Grants

Grants will have approximately the same timeline as last year with the requests for proposals coming out around the first week of October, and the application deadline ending sometime around the first week in January. The exact times have not yet been determined. If a district applies for a 319 grant, they are encouraged to provide a copy of the application and contact Tom Hill regarding the submittal so the division can be an advocate for the district during the 319 process. For more information, please see this link:

http://h2o.enr.state.nc.us/nps/Section_319_Grant_Program.htm

State General Permit Renewal

The current state general livestock operation permits expired Sept. 30. Permit holders were required to apply for permit renewals by March 31. The new general permit includes the following key changes:

- ◆ Phosphorous assessments may be required for facilities in nutrient sensitive watersheds.
- ◆ Sludge must be incorporated within two days of application on bare soil or prior to the next rainfall event, whichever occurs first.
- ◆ Animal waste application must cease within four hours of the issuing of a hurricane or tropical storm warning, or an associated flood watch, for the county in which the facility is located.
- ◆ Routine inspections after one inch of rain and during waste applications shall include visual inspection of ditches and other drainage ways for animal waste discharge.
- ◆ Lagoons must be in compliance with the NRCS 359 sludge level standards within two years.

Applicants not receiving their permit by Oct. 1 remain in compliance with permit coverage via their submitted application.

Pilot Program – House Bill 461, approved June 11, extends the Animal Waste Management Inspection Pilot Program through September 2011. The program was implemented to determine how division staff could more effectively help livestock farms achieve a more proactive approach in complying with environmental regulations, dealing with problems and complaints and using technical assistance. The program was started in 1997 and now includes Columbus, Jones, Brunswick and Pender counties. In the pilot counties, division staff conduct both the annual routine operation review and the annual routine compliance inspection. DWQ staff provides regulatory oversight.

S.L. 2009-92 – House Bill 1175, approved June 11 updates the National Pollutant Discharge Elimination System (NPDES) permitting requirements for concentrated animal feeding operations (CAFOs) in the state. This update was in response to the Environmental Protection Agency's revised CAFO rule that became effective on Dec. 22, 2008. The state general statutes pertaining to CAFOs now reference the revised 2008 EPA CAFO rule. This change may make it possible for DWQ to offer a self-certification option to CAFOs which opt to stay under the state general permit and would like to certify that they do not discharge or propose to discharge animal waste.

EMC Monitoring Rules

The public comment period for the Environmental Management Commission's (EMC) proposed water quality monitoring rules closed on July 14. The proposed rules would require each permitted animal operation in North Carolina to implement a water quality monitoring plan. There was a large turnout for all four public hearings and DWQ also received a substantial number of written comments. The hearing officers are reviewing the comments and are expected to report back to the EMC in January. The January report will include a recommendation on how to proceed with the proposed rules. If the EMC chooses to adopt the proposed rules, it is likely that the rules will be forwarded to the 2010 session of the N.C. General Assembly. Thanks to all district supervisors who took time to speak at the public hearings or submit written comments on the proposed rules.

Lagoon Conversion Program Cooperative Conservation Partnership Initiative

In May 2009, the Division of Soil & Water Conservation submitted a proposal to the NRCS state office to participate in a Cooperative Conservation Partnership Initiative (CCPI). The proposal was to direct available NRCS funding toward projects that would meet the criteria of the state's Lagoon Conversion Program (LCP), with any remaining funds going toward lagoon closures. NRCS approved the proposal at a funding level of \$1.18 million with a two week sign-up period advertised for June. Even with the quick turn-around time, 12 applications were received for LCP projects. After evaluation of all proposals, two projects meeting LCP criteria were approved for funding. The first project funded through CCPI is Rosin Hill Farms in Sampson County which received \$450,000 for a SuperSoils liquid waste treatment system. The second was the Lloyd Ray Farm in Yadkin County, which received \$385,000 for an anaerobic digestion and nitrification/denitrification system. In August, the producers signed federal Environmental Quality Incentives Program contracts and the commission agreed to supplement these contracts with existing state LCP funds to maximize their funding level at \$500,000. The remaining CCPI funds will be used to close swine lagoons on nine farms. We appreciate the opportunity to participate in this cooperative effort with our partners in the NRCS state office and eagerly anticipate the opportunity to pursue a similar funding opportunity in 2010.

Agricultural Water Use Survey

The North Carolina Department of Agriculture and customer services (NCDA&CS) has reported the results from its first annual Agricultural Water Use Survey and the results are interesting. North Carolina farmers use only a small portion of the total water consumed each day in North Carolina. Among water users withdrawing at least 10,000 gallons a day, farmers accounted for about 1 percent of all withdrawals, the survey showed. The department's Agricultural Statistics Division contacted 9,000 farms and received responses from 86 percent. From those responses, statisticians found 1,500 farms that used 10,000 gallons or more of water at least one day during the year. The report included withdrawals from surface sources, such as on-farm irrigation ponds, and ground sources such as wells. The data collected by the NCDA&CS represents a variety of water uses on farms, including water for livestock, crop irrigation and aquaculture operations. The survey showed that average daily withdrawals by farmers totaled 108 million gallons from surface waters and 41 million gallons from ground water. Combined, they accounted for about 1 percent of the more than 15 billion gallons of water used daily in North Carolina.

~ Vernon Cox (919) 715-6109
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SuperSoils Liquid Waste Treatment System



On Farm System

- *Solids separation, nitrification*
- *Soluble phosphorus removal*
- *Solids transported off-site*