Source Water Protection: It’s Time to Reexamine Your Plan
Liz Royer, Water System Specialist

Thanks to the hard work of the National Rural Water Association, Vermont once again has a source protection program. Public drinking water systems have the chance to use VRWA as a resource for source water protection planning, mapping, implementation, management, and updates.

When is the last time you looked at your source protection plan (SPP)? Many of the hard copies of the plans that were archived at DEC in Waterbury were lost during the Irene flooding. Systems are being asked to submit copies of their original SPP along with any updates since that time. Do you know where your original plan is? Have you submitted an update in the past three years?

A properly completed SPP is an invaluable resource for public water system personnel, regulators, and municipal entities such as planning and zoning boards. The primary goal of a properly prepared SPP is for system personnel to have a one-stop manual explaining exactly how to proceed in the long-term protection of drinking water quality. The plan also details what water quality threats exist and explains how to proceed in the very short term in the case of an emergency. Source protection plans are also useful to community planners and regulators making management decisions regarding source protection areas within their communities.

Source protection plans contain vital information for public water systems such as source details, an inventory and assessment of contaminant threats, identification of parcel owners, key contact information, and a contingency plan for water system emergencies. In addition, each plan should have a variety of maps that identify the topography of the SPA, parcel boundaries, and the locations of all potential sources of contamination. VRWA is able to produce the maps needed for your community and can also present information on source protection to water boards and municipal officials.

(Continued on page 9)
Letters

Vermont State Housing Authority

August 26, 2013
Shaun Fielder
Executive Director
Vermont Rural Water Association (VRWA)
20 Susie Wilson Road, Suite B
Essex Junction, Vermont 05452-2827

Dear Shaun:

This is a quick note of appreciation.

Vermont State Housing Authority (VSFA) has been a member of VRWA for many years. It is one of the best investments we have made!

VSFA manages hundreds of units of affordable housing properties throughout Vermont including 18 mobile home parks. Much of our mobile home park stock has aged or problematic infrastructure (that VSFA inherited). VRWA has been particularly helpful in investigating and providing solutions to leaks, pressure problems, etc. in several parks. And they do so promptly, courteously and with a high degree of professionalism.

VRWA has been instrumental in helping us secure funding for large rehabilitation projects. They have consulted with project engineers and water operators when asked. This is key to furthering our mission of providing safe & healthy affordable housing opportunities for Vermonters. VSFA is most fortunate to have an outfit like VRWA in our corner.

Thank you for your assistance in the past and the future!

Best Regards,

Kristen Adams, Housing Development Specialist
Vermont State Housing Authority

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News Leaks is the official publication of VRWA. It is published quarterly for distribution to operators, owners, managers and board members of water and wastewater systems in Vermont, as well as to association members, water and wastewater service providers, regulators, and other friends. Opinions expressed in the newsletter do not necessarily reflect the views and policies of VRWA.

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VRWA Director Harry Hinrichsen Honored with Joint Service Club Community Service Award

The Joint Service Clubs’ Annual Community Service Recognition Night was held in mid-October in Barre to honor individuals who have provided years of unsung service to the Barre area. VRWA congratulates Harry Hinrichsen, one of six individuals recognized for their outstanding community service. We are pleased to have Harry as one of our Directors, a role he has held since 2006.

Harry is the public works engineer for the Town of Barre. He has a long career of community service that includes leadership roles with the following: Boy Scouts, Barre Lions Club, Vermont Municipal Highway Association, Barre Downtown Towdown Committee, Barre Town Green-Up Day, Barre Heritage Festival, Barre Elks Club, Canadian Club, and involvement in the Austine School in Brattleboro. He represents Barre Town on the Central Vermont Regional Planning Commission and on the Vermont State Transportation Advisory Council.

Following severe flooding in Barre in May 2011 and following flooding due to Tropical Storm Irene, Harry provided leadership to secure $10,000 from the national Lions Club to provide supplies and food boxes for victims of the noted disasters.

He and his wife, Linda, reside in East Barre. Congratulations on this well deserved service award Harry and thanks for giving VRWA some of your time.

Jean Nicolai Leaves Drinking Water Division

Many of you in the water field are very familiar with Jean Nicolai. She has worked in the drinking water program since 1991 and played key leadership roles in various division functions and operations. Jean’s objective and no nonsense approach to drinking water rule implementation has been spot on. Jean has taken on a new role in a different division at VT DEC. Earlier this fall she was assigned the Environmental Program Manager role working in the newly formed Administration and Innovation Division. We are sorry she is leaving the drinking water program but recognize she will be an excellent asset for the Administration and Innovation Division. All of us at Vermont Rural Water Association wish her the best.

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HAPPY HOLIDAYS

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ROV inspections can be viewed on TV console during inspection & DVD provided. All inspections include bound reports, recommendations and cost estimates.

Hugh McGee
270-826-9000 Ext. 330
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On April 23, lawyers for one of the largest water districts in Texas will stand before the United States Supreme Court and argue that water in Oklahoma rightfully belongs to the state of Texas.

At the heart of the lawsuit is whether the language of the Red River Compact — signed in 1978 by the basin states of Arkansas, Louisiana, Oklahoma, and Texas, and ratified two years later by Congress — gives entities in Texas the right to water that originates in a particular river basin in Oklahoma.

The lawyers for Tarrant Regional Water District, which serves 1.7 million people in the Fort Worth area, will claim that the stakes are much larger than one watershed. There are 26 interstate water compacts in the United States, and these legal agreements govern water supplies for many of the nation’s fastest-growing and most water-scarce regions. The Supreme Court’s judgment, Tarrant’s lawyers say, “stands to shape the future of some of the most rapidly growing sections of the American West and Southeast, as well as, possibly, America’s prospects for energy independence.”

Tarrant’s legal team argues that if the Supreme Court upholds the federal appeals court ruling, which supported Oklahoma’s restrictions on out-of-state water sales, the justices would throw existing water compacts into chaos and would encourage protectionist policies from states wanting to guard water resources on their soil.

The problem is that almost no one outside of Texas shares that view.

**Red River Rivalry**

In 2004, the Oklahoma Water Resources Board amended a moratorium that the state had in place on water sales to outside buyers — restrictions. Wayne Owen, Tarrant’s planning director, told Circle of Blue that Tarrant had its eye on water resources across the border because they were the most cost-effective option for new supplies that would be needed after 2030.

The Red River Compact was signed by four states: Arkansas, Louisiana, Oklahoma, and Texas. A water district in Texas claims that Oklahoma, by restricting out-of-state water sales, is violating the terms of the compact. The case is now before the U.S. Supreme Court.

As the lawsuit meandered through the courts over the next few years, Oklahoma’s then-Governor Brad Henry (D) signed a law in June 2009 that required the state legislature to approve any out-of-state water sale. Tarrant claims that these restrictions are a violation of the

Continued on next page
U.S. Constitution’s Commerce Clause because they discriminate against certain buyers. But the Tenth Circuit Court of Appeals ruled in September 2011 that the Red River Compact allows states to discriminate because the compact sets water allocations.

Robert Glennon, a University of Arizona law professor, told Circle of Blue that, when Congress ratifies an interstate water compact, it essentially sanctions the restrictions that the states impose. But if that is a given, then the Tarrant team argues that the compact’s allocations would still give Texas certain rights to water that its neighbor is impeding.

**25 Percent of Sub-basin 5**

At issue is a particular patch of water in Oklahoma, called ‘sub-basin 5’ in the compact. According to the compact, the water from this sub-basin is to be divided equally among the four states. The compact reads: “The Signatory States shall have equal rights to the use of runoff originating in sub-basin 5 and undesignated water flowing into sub-basin 5, so long as the flow of the Red River at the Arkansas-Louisiana border is 3,000 cubic feet [85 cubic meters] per second or more, provided that no state is entitled to more than 25 percent of the water in excess of 3,000 cubic feet [85 cubic meters] per second.”

Tarrant sees this unambiguously — Texas can claim one-quarter of the water in this sub-basin, even though the water is in another state.

“A compact, by definition, is a compromise in which a state waives claims to sovereignty in some cases,” Tim Bishop told Circle of Blue. Bishop is an attorney at Mayer Brown and is the lead counsel for Tarrant. “It can’t be the case that, once you enter a compact, you can pass a state law to override it: that creates too much uncertainty for users.”

In its September 2011 decision, however, the Tenth Circuit Court interpreted the matter to mean that states could use one-quarter of the flow from a basin within the state, but that a state could not divert this water across borders. The ruling was welcomed in Oklahoma.

“We successfully defended Oklahoma’s right to protect its natural resources at the district court and circuit court of appeals, and we will continue that fight at the Supreme Court,” said Oklahoma Attorney General Scott Pruitt in a statement to Circle of Blue.

**Friends In Few Places**

Tarrant has not found much sympathy in this case. Nearly all of the amicus briefs — filings from parties interested in the outcome but not directly involved — have sided with Oklahoma.

Arkansas and Louisiana, the two other states bound by the Red River Compact, filed on behalf of Oklahoma, as did a group of water law professors and a pair of water districts in Colorado that draw from interstate rivers. Even states that are part of other interstate compacts — a diverse group including Colorado, Idaho, Indiana, Michigan, Nevada, New Mexico, and Utah — share Oklahoma’s position.

Seemingly the only groups supporting Tarrant are Texas-based organizations and the city of Hugo, Oklahoma, which would like to sell water to Texas. The U.S. Solicitor General also backs Texas.

Mark Davis, director of the Tulane Institute on Water Resources Law and Policy in New Orleans, told Circle of Blue that this case is mostly a compact issue and is not about the Commerce Clause.

“If you have water, you read the compact one way. If you don’t, you read it another,” said Davis, who co-signed an amicus brief supporting the Tenth Circuit’s ruling in favor of Oklahoma. “The fact that Texas has a growing need for water means it’s going to read as many rights into the compact as it can.”

Arkansas and Louisiana, in their amicus brief, wrote that the provision about the equal rights in sub-basin 5 “simply does not constitute a clear expression by the signatory states or Congress that this one phrase was added for the purpose of overriding the regulatory authority of the States over intrastate waters that was otherwise maintained throughout the Compact.”

The compact also makes clear that the states have the power to regulate water within their boundaries. And Arkansas and Louisiana — two wet states that use riparian law that differs from the rights-based system in the American West — have different legal traditions for water than their fellow Red River states.

When asked about if the Supreme Court were to reverse the Tenth Circuit decision, Davis said, “To upend all that is a pretty aggressive reading.”

The only opinions that matter, however, are those of the nine black-robed justices. The court is expected to issue its ruling in June.
support and assistance to communities with all aspects of the Safe Drinking Water Act and Clean Water Act compliance. From humble beginnings National Rural Water Association is now one of the largest utility membership associations in the US with over 30,000 member systems. This includes many of you as members of Vermont Rural Water Association.

During recognition speeches, Rob and John didn’t avoid noting the current day challenges our country faces including budget unknowns, government shutdown, and a tenuous economy.

Even with these challenges referenced, they were quick to note rural water is in a good position. John further offered comments on the issue of dealing with challenges as a constant in any aspect of life. He pointed out our county often faces challenges and challenging times. You get through these issues by being involved and doing work that matters. John iterated the support and assistance rural water offers is vital and shows how dedicated folks are in all aspects of this industry. Interestingly, John referenced the fiftieth anniversary of President Kennedy’s assassination, obviously another challenging time in our nation’s history.

He recalled the following statement of President Kennedy’s, “Be relevant, be important, make a difference.”

Rob Johnson and John Montgomery; there is no doubt your efforts and leadership of rural water were relevant and important, and you both made a difference. Best of luck to each of you as you enjoy your retirement.

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“Be Relevant, Be important, Make a Difference” continued from page 1

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WATER, WASTEWATER & STORMWATER SOLUTIONS
Yankee Ingenuity
Continuing Stories of System Innovations
Wayne Graham, Wastewater Specialist

This column details unique solutions to difficult problems that operators come up with every day. Below are several cases of operators solving large problems, saving money and making life at their second homes (treatment plants) a little easier.

Like a lot of our facilities, the Newport WWTF had gotten away from using plant effluent for in-plant use (flush water, chemical carry water, hose down water) due to inadequate pumping and filter systems. In a successful attempt to not use so much city water, Newport Operation Specialists purchased and installed a new filter system using WWTF effluent for in-plant use, saving the City of Newport 30,000 gallons of drinking water each day.

The Hartford WWTF swapped to UV disinfection, leaving their very large chlorine contact tank as a stilling well for plant water use. The stilling well, now with no chlorine present, started to grow algae and a white fungus causing problems with the UV system and plant water use. In one of the best examples of Yankee ingenuity that I have seen, public works official John Choate solved this problem without spending much money. WWTF staff installed road fabric over the tank, blocking out the sun and stopping the growth of the algae. Rain water easily flows through the fabric. The cover was made to be removed for the winter. If you have an algae issue in a tank, road fabric might be worth a try!

Maintenance on lagoon aeration systems can be labor intensive. In a past article I spoke about using a small crane mounted on a floating platform to be able to lift up suspended type aerators to allow for repairs. Jeffersonville Operations Specialist Michael Watsula has floating Air O2 aspirating aerators. Occasionally the motors and tube assemblies need to be removed. Michael designed and built a small, light weight divot arm/winch assembly that he mounts onto the floating aerator to lift the motor/aspirator assembly and swing it into his boat. He has made a cumbersome and dangerous task easy and safe.

The staff at the Plainfield WWTF solved an SBR air header clogging issue by designing a tool to clean the air headers without emptying the tank. The tool uses air pressure to clean the header and cost $0.00 to build as they used old piping material to make it.

If you have interesting ideas that you want to share, send them to me; we will include them in News Leaks in the future. I also encourage you to tour other facilities and share ideas; you will find that networking with other Operation Specialists can be very beneficial. Several organizations can also help; VTWARN, GMWEA, VT Watershed Mgmt. and of course, VRWA!
Because of the changing dynamics of land use such as new development, varying agricultural uses, and changes in business entities, Vermont requires that SPPs be updated every three years. This provides an opportunity for the water system to reevaluate activities occurring within the source protection area and adjust management strategies as needed. This also helps to ensure that the SPP is a living document, and therefore current and up-to-date. Closely associated with the completion of SPPs are monitoring waivers, which systems can apply for if test results and source protection plans show that the threat from certain contaminants is minimal or non-existent. Class II/V monitoring waivers can save systems considerable effort and keep testing costs low.

Need inspiration? There are newer resources available to help update and improve your SPP:

Check out Source Water Protection Case Studies from EPA: http://water.epa.gov/infrastructure/drinkingwater/sourcewater/

For Teachers - 15 Source Protection Lesson Plans from FFA: https://www.ffa.org/FFAResources/ffalearn/sourcesofdrinkingwater/

National Source Water Collaborative – 25 organizations (including Rural Water) working together to protect drinking water: http://www.sourcewatercollaborative.org/

From the Water Research Foundation - Developing a Vision and Roadmap for Source Water Protection for Drinking Water Utilities (includes 13 case studies): http://www.waterrf.org/Pages/Projects.aspx?PID=4176
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