

2016

Regular Coalition Meetings

April 28

July 28

October 27

At 10:00 AM

Greenbush Township Hall



Working Together to Restore and Protect Our Natural Resources

### Au Sable River Restoration Grant Projects Update

2015 was an active year for projects under the SOGL grant funding awarded Huron Pines (HP) for work within the Au Sable and Pine River watersheds. Beginning back in 2013, several goals have been met to reduce sediment going into the waters, re-connect river miles, improve fish passage, monitor and treat invasive species, and restore stream banks.

In partnership with the US Forest Service (USFS), PRVEL volunteers worked alongside agency staff to help complete a revetment project on the south branch of the Pine near Buhl Rd which included at least 7 soil erosion sites. Logs, small trees, and brush were taken from nearby uplands and placed along the riverbank at selected locations and an-

chored there for stabilization. All disturbed soil was raked out and reseeded

Four important priority road stream crossings were also completed, working with the Alcona County Road Commission. Locations included: East branch at McConnell Rd, East branch at Trask Lake Rd, Grey Creek at Alvin Rd, and Duval Creek at Goddard Rd (pictured below). All such projects assist in reducing the amount of unwanted soil, debris, and pollutants from entering the streams, along with bank stabilization and improvement of aquatic and wildlife habitat.

Invasive species monitoring and treatment was conducted throughout both the Au Sable and Pine

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Before



After

Duval Creek at Goddard Rd completed in 2015

Au Sable River Project Continued from page 1

River watersheds, with special consideration given to an 80 acre parcel of state land located just north of where the Pine flows into Van Etten Lake. PRVEL volunteers, under the direction of the Michigan Dept



*Erosion site on the West branch of the Pine River  
in need of stabilization*

of Natural Resources, and with the assistance of HP staff and AmeriCorps members, made site visits to the area to gather data for use in determining what will work best in the future to eradicate and/or control unwanted plant species within our boundaries, and to pull or treat plants with herbicides. This project will be an ongoing program for PRVEL as long as the support is there and information is needed.

Some monies still remain for work to continue into this year, and planning is underway to decide how best to utilize those funds. USFS has also targeted more stream bank erosion control measures along the Pine for 2016 and more information will be forthcoming as decisions are made including a decision on the proposed removal of Buhl dam (see related article) on the South Branch of the Pine River.

For more information on the work done within the Au Sable watershed area, please visit their website at [www.asrwc.org](http://www.asrwc.org) or [huronpine.org](http://huronpine.org).

## RIVER KEEPERS' UPDATE

The River Keepers program is aimed at establishing a better monitoring system to cover the large area encompassed within the watershed. Individuals volunteering for this program are being asked to watch out for things that could be problematic or might require some action to be taken, but also to report back natural occurrences like animal sightings or quality of fishing/hunting.



In an effort to improve this program, we will be asking our volunteers to become a part of a new venture called “Crowd Hydrology” (see article). This seems a natural fit for those folks already helping to monitor the area and will give PRVEL important information to assist in determining such things as when it is safe to sample, unusual changes of water level within a certain time period, trends throughout the years, etc.

Thank you to all 17 of our current volunteers – your efforts are greatly appreciated and essential to keeping abreast of conditions within the watershed.

**Please consider being a River Keeper** and contact Carole Plunkey at [caroleplunkey@charter.net](mailto:caroleplunkey@charter.net) or 739-8717 for more details.

## SAYING GOODBYE TO PRVEL PARTNERS FAREWELL TO ANDY AND PAUL



Paul Thompson

PRVEL has always benefited from working with each of its partners to reach our shared goals and often, in developing these partnerships, we become not only partners, but friends.

Unfortunately, due to the nature of agency work and/or personal choice, some of those friends leave the area for other posi-

tions and we don't often have the opportunity to thank them one last time for their support.

Such was the case with Iosco/Alcona County District Forester, Andy Beebe and USDA Forest Service District Wildlife Biologist, Paul Thompson.

Andy was not only well educated in a variety of topics related to his job, but had a wonderful enthusiasm for the work he was doing and always was willing to volunteer his help on a number of PRVEL projects. He will be working with Audubon Society in La-Crosse, WI.

Paul was a valuable resource person – the “go to” guy to answer a lot of questions related to our shared interest in protecting and preserving our unique ecosystems, but also went that



Andy Beebe

extra step to assist PRVEL in project development, educational tools, and hands-on assistance. He will be transferring to the Manistee area, working within the Huron Manistee National Forest

They both will be hard to replace and we thank them for their dedication and assistance to PRVEL and wish them well in their new positions.

### Our 2015 Treasury Report

January 1, 2015 Balance	\$5,448.05
Income	
Donations	1,375.00
Grants	1,800.00
Other (VELA River Clear)	125.00
Interest	4.85
Subtotal -	\$3,304.85
Program Expenses	
Meetings	135.90
Temp Loggers	1,571.00
Coliform Sampling	194.00
P/TSS Sampling	242.70
Invasive Project	42.04
River Clearance	250.00
Subtotal -	\$2,435.64
Administration Expenses	
Chamber of Commerce Dues	150.00
Post Office Box rental	68.00
Supplies and Newsletter	69.40
MI Nonprofit Incorporation	20.00
Flyer	57.63
Subtotal -	\$365.03
December 31, 2015 Balance	\$5,952.23

Most of our funding comes from donations from those having an interest in helping us meet our objectives. Please keep us in mind when making your plan for charitable contributions this year.

## Stream Temperature Monitoring Project Update

(in cooperation with Michigan DNR, Tim Cwalinski)

As Spring is (hopefully) not too far away, our fisheries project to help the DNR record water temperatures with digital loggers will be underway. PRVEL volunteers will assist DNR fisheries biologist, Tim Cwalinski and his team to place the loggers at designated spots along the Pine River.



have been monitoring the Pine in other locations for several years.

Long term monitoring helps to determine the suitability of the river for a variety of fish (e.g. brown trout) and other aquatic species. If problems are noted or negative trends are seen, it then becomes possible to take appropriate

All the equipment is ready to go, due in large part to grant funding received last year. However, the grant was received late in the year, so this year will be our first in data gathering. It will not be the first for the DNR, who

measures before there is damage to the ecosystem. Fishing the Pine has been of interest to many sport fisherman over the years, and PRVEL wants to keep it that way.

## PROPOSED BUHL DAM REMOVAL UPDATE

At the January general meeting for PRVEL members, John Bailey, reporting on behalf of Huron Pines (HP), presented an update on the proposal to remove the old Buhl Rd Dam located in Mikado on the south branch of the Pine River. It is believed that the original dam was used to provide electricity for a hunting camp located near the river. US Forest Service has been conducting surveys looking for federally endangered, threatened, and sensitive species that may be affected by this project as well as a cultural resources assessment.

The purpose of this project is to restore fish passage, enhance the aquatic ecosystem, and restore the free flowing condition of the river. The stream bank and river channel would be reconstructed to allow for a more natural flow. The current foot bridge sits atop the dam and would be removed as well and be replaced by a new 25-30 ft. foot bridge for access to the prime hunting and fishing grounds.

Planning for this endeavor has been conducted in partnership with the US Forest Service and several grants have been submitted to provide funding. Mr Bailey reported that preliminary work will be started in February followed by a site visit in March that PRVEL representatives may attend. An



*Buhl Dam on the South Branch*

engineer should be selected by April and work can then begin. Log removal will be necessary upstream of the dam and plans for the new bridge are still being discussed. The expensive project may run up as high as \$300,000 – goal for completion is 2017. PRVEL has furnished a letter in support of this project.

## PROPOSED PRVEL CROWDHYDROLOGY PROJECT

The CrowdHydrology mission is to create freely available data on stream stage in a simple and inexpensive way. This is done through the use of “crowd sourcing”, by which the data is gathered on stream stage (water levels) from anyone willing to send a text message of the water levels at their local stream to [www.crowdhydrology.com](http://www.crowdhydrology.com). These data are then available for anyone to then use from Watershed Associations and Universities to Elementary schools.

Inspired by a California researcher, University of Buffalo (UB) geologist, Chris Lowry, is turning to the public for help in monitoring the water levels of streams. Like other examples of crowdsourcing, the UB effort, called “CrowdHydrology,” harnesses the collective efforts of many different people to complete a task. With tight budgets forcing the U.S. Geological Survey to discontinue the recording of water levels at many streams the agency has monitored for decades, CrowdHydrology offers a simplified model for communities looking for a cost-effective method for maintaining some data on local waterways.

A measuring point is created by mounting a measuring staff on a fence post in the stream, along with instructions explaining how committed volunteers or passersby can contribute to CrowdHydrology by texting the water level and stream location (identified by a station number) to researchers. Besides benefiting PRVEL in its stream monitoring efforts, the data also provide useful data to scientists and benefits sportsmen such as local fishermen. Participating in CrowdHydrology could also be a fun way for students to learn about local streams and how waterways respond to rain and dry spells.

It is proposed that PRVEL install monitoring sites at six locations in the Pine River watershed as follows:

1. Pine river at Kings Corner Road
2. Van Etten creek at Barlow Road and Pine River Trail
3. South branch of the Pine at the Pine River campground
4. East/West branch of the Pine at F-30
5. West branch of the Pine at Cruzen road
6. South branch of the Pine at Cruzen road

### Watershed Wildlife Watch Great Blue Heron

Seen often within our watershed, this large grayish-blue bird wades in shallow water in marshes, ponds, and along lake shores and stream edges. They stand about 2-4 ft tall and weigh about 5 pounds. They feed on fish, frogs, and other small animals, captured by a quick jab of the beak, and usually swallow their prey whole. They nest in colonies, usually building their stick platform nests in trees in lowland hardwood swamps.

Their call is a harsh croak, most often heard during breeding season, but can also be heard any time of the year if disturbed or in territorial disputes. They are often confused with the larger sand hill crane, but they fly with their neck folded back (tucked in), while cranes fly with their necks extended. Also, herons are commonly seen in small suburban wetlands while cranes are generally less tolerant of people.



**E. Coli Sampling Update**  
by Dan Stock, Water Quality Monitor

Samples were taken monthly from April through October except for June at twelve locations on the Pine River system in 2015. In addition to the sampling of five base locations on the Pine, seven sites were sampled on the South, East and West Branches of the Pine this year.

**Table 1 - Pine River Watershed E. coli Monitoring**

Location	Site No	2015				10-year Combined Results			
		No	Mean	Max	Min	No.	Mean	Max	Min
Pine River and Tributaries			No./100 ml			No./100 ml			
			#/100 ml			#/100 ml			
Pine River @ Coounty Line	01	6	162	360	100	44	75	3500	1
Pine River @ F-41	02	6	137	260	80	41	68	2400	1
Pine River @ Cruzen Road	04	6	86	320	60	41	59	2600	1
Van Etten Crk @ Barlow Road S.	11	6	223	400	140	40	146	3600	1
E/W Pine River @ F-30	31	6	77	260	20	41	112	3800	20
E Br Pine River @ Procnier	34	6	122	240	40	25	125	1000	20
E. Br Pine River @ McConnell Road	37	6	76	200	10	14	45	240	1
E. Br Pine @ M-72 @ F-41	38	6	39	280	0	25	60	1750	0
W. Br Pine @ Cruzen Road	41	6	106	140	80	22	78	1450	1
S. Br Pine below Buhl Dam	05	4	81	200	20	4	81	200	20
S. Br Pine above Buhl Dam	06	4	75	200	40	4	75	200	40
S. Br Pine @ Rearing Pond Road	07	5	61	340	20	5	61	340	20

All results are expressed as CFU (colony forming units)/100 ml

**Observations**

1. The geometric means for six of the nine of the sites sampled in 2015 were higher than the 10 year means. However, five of the six sites sampled in 2014 had lower values.
2. **The bacteriological quality of the streams in the watershed continues to be high and additional sampling should indicate whether the increased counts are part of a trend.**
3. A continuation of the sampling program at the same base sampling points and at selected locations on Van Etten Creek and the South Branch above and below Buhl Dam is planned for 2016.

**MICHIGAN E. COLI STANDARDS**

Many county health departments routinely collect water samples at beaches to determine if the water is safe for swimming. A laboratory using standard methods performs the analysis. E. coli bacteria are counted and judged against standards established by state rules.

County health departments need to take a minimum of three samples each time a beach area is monitored. The daily geometric mean calculated from these samples must be below 300 E. coli per 100 milliliters for the water to be considered safe for swimming. A minimum of five sampling events (consisting of at least three samples per event) must be collected within a 30-day period for the results to be considered a reliable indication of water quality. After 30 days, a geometric mean is calculated for

all the individual samples collected. This 30-day geometric mean must be below 130 E. coli per 100 ml for the water to be considered safe for swimming.

When conducting sampling, it is important to understand that random, individual samples are not reliable indicators of water quality. The sampling being done in our watershed does not conform to the above procedures. However, it is important to keep in mind that it is not intended to provide an indication of suitability for swimming but only to provide indications of elevated E. coli concentrations if they occur. The 300 E. coli per 100 ml per individual sample and the 130 E. coli per 100 ml for the geometric mean provide convenient numbers to use for comparison.

PRVEL Coalition Board

Chair - Carole Plunkey	<a href="mailto:caroleplunkey@charter.net">caroleplunkey@charter.net</a>
Recorder - Susan Malski	<a href="mailto:smallard3@yahoo.com">smallard3@yahoo.com</a>
Treasurer - Dan Stock	<a href="mailto:dstock4239@charter.net">dstock4239@charter.net</a>
Scott Lingo	<a href="mailto:scott@targetrealestate.com">scott@targetrealestate.com</a>
Arnie Leriche	<a href="mailto:aleriche526@gmail.com">aleriche526@gmail.com</a>

Non-Voting Advisors

US Forest Service	Huron Pines RC&D
USDA-NRCS	DNR/Fisheries
US Fish & Wildlife	DEQ/Water Quality

How Can I Volunteer for PRVEL?

Our conservation group is comprised totally of volunteers, all working together to make things happen for the benefit of the watershed. Please step forward and make 2016 the year you help us make a difference in your neck of the woods.

Ways you can volunteer:

- Macro invertebrate sampling program – Spring and Fall  
Next sampling in May on dates to be announced
- Monitoring fishery – place temp loggers
- River Keepers/monitor watershed out in the field
- Write articles for the newsletter
- Serve on the watershed board of directors
- Project workers – out in the field (seasonal)
- Fund raising – bring ideas to attention of

Contact via email  
as shown above

- Arnie Leriche
- Scott Lingo
- Carole Plunkey
- Dan Stock
- Carole Plunkey
- Carole Plunkey
- any board member

**Yes! I wish to support the water resource improvement efforts in the Pine River Van Etten Lake Watershed with my tax deductible contribution.**

**Please make your check payable to PRVEL Watershed Coalition and send to:**

**PRVEL Watershed Coalition  
PO Box 680  
Oscoda, MI 48750**

**Name** \_\_\_\_\_

**Street** \_\_\_\_\_

**City** \_\_\_\_\_

**State/Zip** \_\_\_\_\_

**Phone** \_\_\_\_\_

**E-mail** \_\_\_\_\_