



Upper White River Watershed Alliance (UWRWA) 2009-2010 MS4 Report

1.0 SURVEY & EDUCATION PLANNING

2009 Social Indicator Survey

In 2009, the UWRWA with the technical and financial support of nine participating MS4s undertook a regional public survey. The type of survey, known as a social indicator survey, was designed to gain insight into the public's baseline knowledge of water quality and stormwater issues, as well as discern critical information needed to create an effective long-term education and public involvement plan. The survey questionnaire was developed collaboratively between the UWRWA leadership and Purdue University professors and researchers. The UWRWA and participating MS4s worked to insure the cover letters had appropriate local signatures and that a reliable bank of addresses was utilized for each survey area. The deployment of the survey itself and the analysis of the results were conducted by staff at Purdue. Eight municipal communities and one university community (Ball State) were involved in the survey. A total of 2856 survey were distributed with 1185 returned, resulting in a 41.5% return rate in the municipal areas. Return rates varied from community to community, but all surveyed areas reached the critical threshold of 30% return that is necessary to be considered statistically significant. Due to the challenges of reaching students through residential mail service, surveys were distributed electronically via email to Ball State students and faculty. This approach was less than desirable since there was no way to 'clean' the addresses and seek return service; regardless, 867 surveys were returned. The survey results were then used to craft the 2010 education program and associated mass media campaign.

Participating MS4s:

- Hamilton County
- Town of Cicero
- City of Noblesville
- Town of Fishers
- City of Westfield
- City of Carmel
- Town of Pendleton
- Town of Zionsville
- Ball State University

UWRWA Education Committee

The UWRWA coordinates an Education Committee that typically meets bi-monthly or more frequently if needed. This group has historically been comprised of the MS4s participating in the regional UWRWA MS4 Public Education and Involvement Program (listed above). Recent efforts have expanded this committee to other interested organizations and stakeholder groups. A draft work plan has been developed for this growing committee. Efforts to move various projects forward are guided by the committee's Chairperson. The current Chairperson is Tim Stottlemeyer from the City of Noblesville. Work plan details and Committee deliverables are tied directly to the results of the social indicator survey. Education Committee meetings details, the draft work plan, and meeting notes are now available on the UWRWA website. Direct outreach to complimentary organizations and coordination with their activities are ongoing through the UWRWA Coordinator.

Stormwater Managers' Resource Clearinghouse

Educational resources related to stormwater have been collected from across the country and compiled into a resource clearinghouse. The clearinghouse is available on the UWRWA website via password login to participating MS4 coordinators. It is organized by topic and type of material. All materials have received copyright permission for use and reproduction. Many resources are set up to allow for individual program logos to be added to them. Materials from the clearing house have been used at the Central Indiana Stormwater Workshop, as well as other UWRWA events. A thousand (1000) stormwater crossword puzzles and 600 pollution prevention stickers have been distributed at events.

2.0 MASS MEDIA EFFORTS**Clear Choices Clean Water Campaign Television Spot**

Survey results indicated that the public had a limited understanding of the final fate of stormwater and the relative impact of pollution sources. Respondents also expressed their likeliness to make certain water quality behavior changes versus others when presented with a suite of possible actions. When asked about preference for media type, the survey indicated that television was one of the preferred media choices for delivering educational messages. The Education Committee used this collective information to hone in on a message that would both communicate the interconnected nature of the water cycle, along with a requested action/message regarding a possible water quality behavior change that could be made by individuals. The initial requested action was the use of no-phosphorus fertilizer. A campaign called Clear Choices Clean Water resulted. A 30 second television spot was developed to increase awareness and knowledge about fertilizer containing phosphorus and its impact on local water quality. Clear Choices messaging will continue to grow over the next few years, focusing on topics such as pet waste, yard waste, grass clippings, rain gardens, and septic system management. The Upper White River Watershed Alliance teamed up with two other charter sponsors (including IUPUI-Center for Earth and Environmental Science (CEES)) and launched an interactive website associated with this new campaign on June 16th, 2010.

Based on the TV air time schedule (roughly end of June to the end of August), the Clear Choices Clean Water campaign TV spot, when complete, will have delivered 1,437,145 impressions/exposures to adults ages 35 to 64 throughout the course of the campaign. The schedule is projected to reach 48.3% of adults ages 35 to 64 (in cable households, Comcast and Brighthouse) an average of 5.8% times. It will have delivered 278.2 Gross Rating Points (GRP). GRP measures the size of an audience reached by a specific media vehicle or schedule. It is the product of the percentage of the target audience reached by an advertisement multiplied by the frequency they see it in a given campaign. For example, a TV advertisement that is aired 5 times reaching 50% of the target audience, it would have 250 GRP = 5 x 50% (i.e., GRPs = frequency x % reach). Target audiences, and therefore channel sections, were determined based on the demographics of the social indicator survey respondents.

Clear Choices Clean Water IMAX Showing

On June 30, 2010, the Clear Choices Clean Water TV spot aired at the premier event of Ultimate Wave Tahiti at the Indiana State Museum IMAX theatre. The spot was introduced and aired by partners at Veolia Water. Approximate 400 people were in attendance at the premier event. The spot continued to air through the run of Ultimate Wave and will also run with the next featured filmed premiering in September 2010. Estimated viewership for 2010 is 30,000 people.

Clear Choices Clean Water Newsletters and News Releases

HortusScope Newsletter

The Clear Choices Clean Water (CCCW) campaign was published and promoted in HortusScope, a central Indiana gardening e-bulletin. Additional half page CCCW advertisements will also occur in the fall 2010 and spring 2011 issues. Circulation of this newsletter reaches approximately 600 subscribers.

Water Column Newsletter

The summer 2010 issue of Water Column featured stories on phosphorus reduction efforts on-going statewide. The CCCW campaign was highlighted and noted as an important grassroots effort and a way individual landowners could get involved. This newsletter is generated through financial support from the Indiana Department of Environmental Management's Clean Lakes Programs and technical authorship from Indiana University's School of Public and Environmental Affairs staff. Circulation of this newsletter is statewide and reaches approximately 285 hard copy subscribers and 489 electronic copy subscribers.

News Releases

A new release regarding the CCCW campaign was drafted and circulated to 59 print media vendors on July 20, 2010. An edited version of the news release was tweaked to target businesses and business leaders and submitted to three business focused publications.



3.0 WEBSITES

Clear Choices Clean Water Website

The UWRWA teamed up with the Tippecanoe Watershed Foundation (TWF) and IUPUI-Center for Earth and Environmental Science (CEES) to launch a unique interactive website strategy to increase awareness and knowledge about fertilizer use and lawn care and its impact on water quality. This effort was linked directly to the 30 second TV spot on no-phosphorus fertilizer use and designed to further promote individual action. The TV spot was used as one vehicle to promote the website pledge campaign. Other vehicles such as newsletters and presentation promotions are described below. The overall campaign was designed to make businesses and homeowners aware of water friendly lawn care choices, supply them with materials they made need, offer answers to lawn care questions, and provide an opportunity to make an individual commitment. Several key features of the interactive website include: a pledge map, a supplier locator guide, a FAQ section, phosphorus water quality data, and a coupon center. The campaign's broad name and statewide reach, will allow for future expansion of the campaign and educational materials beyond the current message of fertilizer use. This intentional strategy will be the foundation to grow educational efforts toward other water quality friendly choices as the UWRWA and its participating MS4s and other partners advance their messaging. The option to take multiple types of

pledges and to create resources centers by topic will be developed as awareness and funding is raised each year for the campaign. Future campaign topics will be driven by the results of the social indicator survey.

www.clearchoicescleanwater.org statistics:

- Launched June 16, 2010
- 143 pledges to date
- Projected reductions in phosphorus use total 1000 pounds to date
- Projected reductions in resultant algae growth total 500,000 pounds to date



UWRWA Website

February 2009 was the launch of the new and improved website for the Upper White River Watershed, www.uwrwa.org. The new site replaced the old site hosted through IUPUI. The website provides resources for all types of audiences in the watershed – residents, businesses, educators, engineers, planners, agriculture producers, stormwater managers, etc. Resources range from basic watershed information to interactive educational tools such as the Best Management Practice Selection Tool. Also included are both interactive and downloadable maps such as the Surf Our Shed tool and resources detailing the locations of liveries and launches and important species. The larger, interactive resources that have been created are better described below. Since the website is laid out by target audience, users can find specific materials aimed at their interests and what they can do to get involved and improve water quality directly. The website is also home to upcoming meeting details, as well as the promotion of big events in the watershed and current news stories.

June 10, 2010 marked the launch of the new design of the website template. The new design changed the appearance of the site, but did not alter any of the content. The aim was to make the interactive tools easier to find and to guide the user to key features through the use of more prominent icons.

www.uwrwa.org statistics:

- The website had 3591 hits from February 2009 to June of 2010.
- Since the change to the new design, the site has had 296 hits.



4.0 INTERACTIVE WEB-BASED RESOURCES

The below set of resources were developed by the UWRWA Technical Committee. This committee is comprised of consultants, county and city staff from multiple communities and varied disciplines, as well as participants from other non-profit groups. The Technical Committee is open to public participation. Meetings occur bi-monthly with meeting locations, times, and meeting records posted on the website and emailed to the UWRWA email list serve. The Technical Committee has roughly 20 participants.

Best Management Practice Selection Tool

The BMP Selection Tool was developed to help educate site designers and developers about some of the important factors associated with the selection of post-construction stormwater BMPs for a given site. Volume control, groundwater protection, and pollution reduction are growing concerns in Central Indiana. Each of these, as well as other factors, makes some BMPs more applicable to certain sites and more successful tools for water quality protection. The Selection Tool helps designer know what is possible on a site and what is compatible with associated site objectives or limitations. The Details feature and the linked BMP Fact Sheets provide educational and practical information about the various selection factors and practices themselves.

Surf Our Shed Watershed Navigation Tool

The Surf Our Shed tool is a unique resource created to help watershed residents understand land use, water use, and water quality connections. The Indiana Water Information Network (IWIN) that feeds current data to the tool was created by IUPUI’s Center for Earth and Environmental Science (CEES), an active member in the UWRWA. The tool utilizes Google Earth and several Geographic Information System data layers to help show the proximity and connections between many different natural and human-influenced elements in the watershed. A user can literally ‘surf’ up and down stream and view sample locations, point source pollution locations, and local watershed boundaries. It can also be used to create custom maps that the user can then insert into presentations or local outreach materials.

Central Indiana Development Ordinance Review Checklist Tool

The Central Indiana Development Ordinance Review Checklist was created as part of an effort to assist the City of Indianapolis and other nearby communities in evaluating existing development codes, regulations, and ordinances for compatibility with Low Impact Development (LID). The checklist was designed to help identify potential regulatory or planning process impediments that could affect the use

of, or successful implementation of, LID practices in new developments, as well as in infill or redevelopment projects. The checklist is a tool that land use planners, transportation planners, public works personnel, city engineers, building code enforcement officers, development site plan reviewers, and others can use to evaluate the state of existing codes, regulations, ordinances and practices. Once topics or issues that may hinder use of LID practices are identified, personnel from these entities can work together to modify codes to enable, encourage, and promote the use of LID practices by city departments, builders, developers and property owners to apply low impact techniques while also ensuring high quality development, adequate access, and public safety.

Launch and Liveries Map

The Launch and Liveries map was developed to encourage the public to use and enjoy the river's recreational aspects. It is a resource aimed at the general population, as well as professionals that are engaged in planning for the river's recreational future. The interactive Google map feature allows the user to get specific information about the launch site and its proximity to other sites. Development of this tool will also allow the UWRWA to expand future river clean-up efforts and pilot educational float trips through different sections with various target audiences.

5.0 PUBLIC INVOLVEMENT EVENTS

White River Clean Up

2009

In 2009, the annual White River Clean Up was held on Saturday, September 13th. This public involvement event is a community volunteer event to remove trash from the White River and educate the public on how they can make a difference in their community and water quality. Communities and organizations from the headwaters of the White River in Randolph County through Morgan County participated in this watershed-wide event. The event received various local media coverage including television, radio, and press. A feature story was printed on the front page of the Indianapolis Star, as well as an in studio interview with Jill Hoffmann (UWRWA Coordinator) on WISHTV Channel 8. WTHR Channel 13 also aired live footage and interviews with UWRWA groups on the day of the event that were shown during both their noon and evening broadcasts. This event is coordinated by many of the individual MS4's and key local interest groups, in conjunction with the UWRWA.

Participants included: Indiana Smallmouth Alliance, Muncie-Delaware Clean and Beautiful (including the cities and towns of Muncie and Yorktown), White River Watchers, Hamilton County, City of Noblesville, Keep Noblesville Beautiful, Town of Fishers, City of Carmel, Confluence Dynamics, Camptown, Friends of White River, Marion County Health Department, IUPUI-CEES, Indianapolis Zoo, Morgan County Partnership for Water, and the Indiana Department of Environmental Management.

- sixteen groups across six counties participated
- over 1366 volunteers
- 25 tons of trash removed
- 483 tires removed
- 2 car batteries removed

2009 Event Award

The UWRWA was awarded the City of Carmel's Green Award for the river clean up event. A recognition ceremony was held as part of the City's Chamber of Commerce annual awards meeting. A subsequent

press release was issued and newspaper article was published recognizing the winners, including the UWRWA.

2010

In 2010, the annual White River Clean Up is scheduled for Saturday, September 11. This year's effort are expected to include the same number of groups across five counties (no efforts are planned for Randolph County this year).

Watershed Management Plans

The UWRWA sponsored three Lake and River Enhancement grants for regional and local watershed management planning. Plans and assessments were developed and conducted for the larger Regional Upper White 16 county area, as well as for the 10-digit HUC watersheds draining to Morse and Geist Reservoirs. The Geist/Upper Fall Creek planning effort included 7 meetings of the local Steering Committee, as did the Morse/Cicero Creek local Steering Committee. Two large public input meetings were also hosted in each of watersheds. Average attendance at each of the meetings was roughly 20 people.

Development of the regional watershed management plan included dozens of interviews and meetings with MS4 coordinators, local planners, and agency resource professionals. The final document summarizes roughly twenty years of water quality data, as well as assesses institutional resources (social and/or regulatory) and land use analysis. Collectively the effort and knowledge gained from the public and local leaders helps paint a picture of water quality hotspots and opportunities in the watershed.

6.0 WORKSHOPS/EVENTS**2009 Keep It Clean - Stormwater Workshop**

The 2009 Stormwater Workshop took place on January 21-22, 2009 at the Marriott East Conference Center in Indianapolis. The workshop provided educational sessions on current Indiana stormwater policies, engineering techniques, and on-site materials that assisted attendants in the implementation of Stormwater Pollution Prevention Plans (SWPPPs), in addition to many other relevant site design topics. Breakout sessions focused on LID site redesign, road and highway BMPs, and case studies on green development. A subcommittee of the Upper White River Watershed Alliance's Educational Committee coordinated and managed this two day workshop. The subcommittee was comprised on several participating MS4s, SWCD staff, and consultants.

- 295 attendees; 208 attending the first day session targeted at designer and developers, 212 attending the second day session targeted at contractors and builders
- 28 speakers participated across the two day workshop

2010 Keep It Clean - Stormwater Workshop

The 2010 Stormwater Workshop took place on February 10-11, 2010 at the Marriott East Conference Center in Indianapolis. The workshop provided educational sessions on current Indiana stormwater policies, engineering techniques, and on-site materials that assisted attendants in the implementation of Stormwater Pollution Prevention Plans (SWPPPs), in addition to many other relevant site design topics. Breakout sessions focused on construction sequencing, working around waterbodies, and post-construction BMP maintenance. A subcommittee of the Upper White River Watershed Alliance's Educational Committee coordinated and managed this two day workshop. The subcommittee was comprised on several participating MS4s, SWCD staff, and consultants.

- 245 attendees; 225 attending the first day session targeted at designer and developers, 178 attending the second day session targeted at contractors and builders
- 29 speakers participated across the two day workshop

Project WET Workshops

Project WET partnered with the Upper White River Watershed Alliance to host training workshops focused on stormwater impacts and associated educational materials. Project WET workshops are designed to give both traditional and non-traditional educators tools and strategies to reach and impact children, parents, other educators, and the general public through interactive water education activities. Participants are taught how to use Project WET materials in the classroom, as well as at outdoor venues. They are introduced to the WET Curriculum Guide and are therefore then certified to teach using Project WET resources.

- A Project WET workshop was held on August 27, 2009 at Zionsville Town Hall in Zionsville, targeted at non-traditional educators. 33 participants attended and were certified.
- A Project WET workshop held on June 4, 2010 at Forest Park in Noblesville, targeted at Parks Department staff and summer camp counselors. 18 participants attended and were certified.

Healthy Water Healthy People

The Indiana Department of Natural Resources' Hoosier Riverwatch and Project WET programs partnered with the Upper White River Watershed Alliance to deliver a Healthy Water Healthy People (HWHP) workshop to raise awareness of the relationship between water quality and public health. Participants were taught to: 1. Understand the relationship between water quality and public health, as well as Indiana water quality standards; 2. Communicate effectively the relationship between water quality and public health and associated health risks; 3. Understand the types of waterborne diseases, as well as the source and spread of these diseases; and 4. Identify ways to prevent water pollution and exposure to health risks.

- The Healthy Water Healthy People workshop was held at the Fishers Train Station building, October 15, 2009, in Fishers.
- 23 participants attended and were certified to teach the HWHP materials.

Blue-Green Algae and Nutrient Symposium

The UWRWA co-sponsored the Blue-Green Algae and Nutrient Symposium with IUPUI's Center for Earth and Environmental Science, Veolia Water, and the Eagle Creek Watershed Alliance. The general session presented a comprehensive overview of blue-green algal bloom issues including environmental factors, innovative research, policy implications, and outreach solutions. An afternoon panel discussion utilized experts in various fields including regulatory policy, public health, legislation, fertilizer product sales, and municipal officials, to answer questions related to solutions to nutrient enrichment and algal bloom management in Indiana.

- The Symposium was held on June 17, 2010 at the Rathskeller in Indianapolis.
- 194 participants attended the day-long event.

Blast on the Bridge Event at Geist – July 4, 2010

The UWRWA, in conjunction with Veolia Water Indianapolis and Geist Watershed Alliance, assisted with the graphics development (water quality/algae data and Clear Choices campaign materials), a large public banner, and content for broadcast announcement/messages at this popular event. A 12'x12' educational tent for the bridge was set up and staffed. Educational efforts were focused on improvement of water quality, best practices and the Clear Choices Clean Water campaign participation.

- Estimated 10,000 people on the bridge event
- Estimated 3,000 people on boats
- Estimated additional 20,000-30,000 viewers around the reservoir and adjacent neighborhoods

7.0 PRESENTATIONS

Large-scale Speaking Engagements

The UWRWA frequently delivers technical presentations about regional watershed planning strategies and efforts at statewide events. These presentations encapsulate on-going studies and scientific knowledge about water quality and water quality solutions. Every presentation focuses on the key messages and resources that have been developed by the UWRWA's Education and Technical Committees. Some of the larger venues are listed below:

- Indiana Association of Soil and Water Conservation Districts (IASWCD) Annual Conference, January 2009 and 2010. Approximately 45 session participants.
- Indiana Lakes Management Society and the Indiana Chapter of the American Fisheries Society Conference, January 2009. Approximately 60 session participants.
- Indiana Association of Floodplain and Stormwater Managers (INAFSM) Annual Conference, September 2009. Approximately 65 session participants.
- Veolia Water Community Advisory Group, August 2010. Approximately 25 session participants.
- IDEM IN STEP Watershed and Local Planning Training Sessions, September 2010. Approximately 40 session participants anticipated.

UWRWA General Membership Meetings

The UWRWA hosts quarterly general membership meetings that feature a 30 minutes presentation on a natural resource related educational topic. Meetings are widely advertised to both members and non-members and many times non-members in fact attend.

Topics for 2009 included:

- Overview of Lower Fall Creek Watershed Management Plan – findings, next step activities, and future initiatives. March 19, 2009, 16 attendees.
- Overview of interactive Google Earth/GIS platform for Upper White Watershed – Surf Our Shed Tool. June 9, 2009, 19 attendees.
- The Nature Conservancy's analysis of the Wabash and White Rivers, why they are important along with a brief glimpse into strategies that are abating threats to the system. September 29, 2009, 13 attendees.
- A three part discussion on nutrient transport and emerging public health concerns – an overview of nutrients and pesticide movement across different land uses and relationships to storm discharges. December 15, 2009, 21 attendees.

Topics for 2010 included:

- Overview of the Central Indiana Land Trust's Greening the Crossroads project – a multicounty ecological evaluation helping to identify conservation planning priorities in Central Indiana. March 4, 2010, 14 attendees.
- Day-long symposium on blue-green algal blooms, links to nutrients, and public health concerns. June 17, 2010, 194 attendees.
- Viewing of Drop by Drop video on aging infrastructure, septic systems impacts, and overall health of Indiana waters. September 30, 2010, anticipating roughly 30 attendees.

8.0 Future Plans

Clear Choices Campaign

The Clear Choices campaign will continue with the creation of new TV media spots and pledge campaigns. Topics will be discussed and decided upon via input for the Education Committee, as well as the social indicator survey findings. New community sponsors will also be sought for partnership of this project.

Stormwater Video Production

A short five minute video is already under production to help succinctly articulate the environmental and social challenges associated with stormwater management. The video will be used as a primer at meetings or workshops to help raise the base level education of several audiences. The video is being produced in partnership with WFYI and sponsored via a grant from American Water.

Watershed Management Plan Implementation

A variety of grants are being sought for implementation of exiting watershed management plans. Requested funds will be aimed at local cost share projects, technical assistance for urban outreach, and broad scale public education.

Indiana Museum of Art FLOW Project Coordination

FLOW is the first pilot project of *City as Living Laboratory – Sustainability Made Tangible through the Arts*, a new initiative developed with Marda Kirn of EcoArts Connections in coordination with internationally recognized artist, Mary Miss. The project is intended to make issues of sustainability compelling to the public. It will demonstrate how the affective power of the arts can be used to engage the public and enhance awareness to environmental issues. Working in close collaboration with Butler University, the city of Indianapolis, USGS (United States Geological Survey) and other educational institutions and museums around the area, the project will operate in the physical as well as the virtual realm. FLOW (Can You See the River?), designed for the Indianapolis Museum of Art, will focus on the White River and its watershed.

Workshops

The annual Keep It Clean Workshop will continue. A variety of formats are currently being considered in order to increase the participation of contractors.

River Clean-Ups

The annual White River clean up will continue. The UWRWA will continue coordination across groups and among sponsors, as well as advertise the local events and provide media resources. Future efforts may include capacity development of smaller groups along some of the key tributaries.

Expansion of the Education Committee

The UWRWA will work to expand participation of the Education Committee and focus on regional programming and approaches for schools and other key target audiences. A primary focus will be to develop consistent simple messages that can be repeated through a variety of venues and partners' programs. The committee will plan to meet bi-monthly and deliver products that are tied to a work plan.