# 2017 INAFSM Conference

# Field Trips Sign Up Form

(No payment will be accepted on this form)

Space on tours is limited so please fill out additional tour registration form for each guest.



Click here to register for tour/field trips.

Conference registration not included with tour registration.

# **WEDNESDAY TOURS**

### WEDNESDAY, TOUR A - SMART SEWER CONTROLS ACROSS FROM CENTURY CENTER

September 6<sup>th</sup> 8:45am – 10am – max 30 attendees

Tim Braun - Smart Sewers EmNet Controlling of stormwater into basins. Controls for all the Smart Sewers across from the Century Center. Tim Braun <a href="mailto:tbraun@emnet.net">tbraun@emnet.net</a> (574) 440-4033 EmNet has offered a bus for this tour.

**Summary:** At the turn of the 21<sup>st</sup> Century, the City of South Bend had a nasty CSO problem. Every year its combined sewers overflowed at least 30 times a year in dry weather and spilled 1-2 billion gallons of combined sewage into the Saint Joe River during wet weather. The City decided to try something new. In 2004, it partnered with the University of Notre Dame to pilot a modern technology being offered from what was at the time a newly minted Notre Dame start-up called EmNet.

After several pilot projects with EmNet, the City commissioned a distributed network of 120 flow meters, rain gauges and level transducers, backhauling real time data for analysis and visualization. By "Turning on the Lights" in the collection system and observing the actual hydraulics of the system in real time, the City could clearly see the artificial bottlenecks throughout the sewershed. Within 12-18 months of commissioning, the City could eliminate dry weather overflows and make a substantial dent in wet weather overflows by addressing the problems identified by the data. In 2012 the City added 9 coordinated real time control sites that, together with the City's new data-driven preventative maintenance program from the sensor network, have since taken the total CSO volume reduction to

more than 75%.

Armed with a new CIP plan, which is backed by years of continuous monitoring and real-time modeling data, South Bend is going back to IDEM and EPA Region 5 to reopen its consent decree. The City hopes to achieve \$500 million in CIP savings with its Smart Sewer program. Our tour will begin with a brief program at the Century Center to introduce the technology and South Bend's Smart Sewer system. We will then travel the interceptor route, pointing out several control sites along the way and stopping to tour the most downstream control site before returning to the Century Center.

Attendees will meet downstairs in room #1 for a 10 - 15-minute dissertation on this project prior to boarding the tour bus. The tour bus will be parked in the parking lot just outside the south entrance door.

#### WEDNESDAY, TOUR B - CITY OF SOUTH BEND PERMEABLE PAVER APPLICATIONS

September 6<sup>th</sup> 8:45am – 10am (Tour B) – Max 20 attendees

Corbitt Kerr – Permeable paver applications.

**Summary:** The City of South Bend is leading the way forward in terms of sustainability and innovation, featuring LEED certified buildings, community gardens, native species wildflower lots, rain gardens, and sustainable practices. Corbitt Kerr (SB City Engineer), along with the South Bend Office of Sustainability will be conducting an hour-long walking tour illustrating the many innovative stormwater management projects within a proximity of the Century Center.

Attendees will meet at the front door for this walk tour. Please bring umbrellas / rain gear should we have rainy weather.

# **FRIDAY TOURS**

# FRIDAY, TOUR A - PARTS 1 & 2 - SOUTH BEND PARKS & REC EAST RACE WATERWAY RIVER RESCUE SCHOOL & BODINE FISH LADDER ACROSS FROM CENTURY CENTER

September 8<sup>th</sup> 1:45 – 2:45 (Tour A - part 1) – Max 20 attendees

<u>PART 1:</u> Paul McMinn (South Bend Dept. of Parks & Recreation) tour / educational segment on the East Race waterway next to the Century Center. Paul has 40-years' experience with the waterway and started the river rescue school. <u>pmcminn@southbendin.gov</u> (574) 235-9931.

Part 1 Summary: The East Race is a manmade whitewater course that has operated for 33 years and over 400,000 rafters and kayakers have traversed its rapids. Participants will learn the history, operations, and the economic impact of the waterway. They will also learn about the Indiana River Rescue schools and the International River Rescue Specialists Conference held at the East Race. (please see: <a href="http://sbvpa.org/parks/east-race-waterway/">http://sbvpa.org/parks/east-race-waterway/</a>)

PART 2; Dave Meuninck, DNR - Bodine Fish Hatchery tour / educational segment on the fish ladder directly

across from the Century Center. < <u>DMeuninck@dnr.IN.gov</u>> (574) 255-4199. SCROLL DOWN TO REGISTER.

Part 2 Summary: The Bodine State Fish Hatchery produces the Skamania strain steelhead trout, which is one of the most popular salmonid species in the Lake Michigan basin. Competed in 1988, this vertical slot ladder is located approximately 56 miles upriver of Lake Michigan. This ladder provides fish passage around the South Bend Dam, a non-electrical producing roller dam. The South Bend ladder includes a viewing window which allows biologist to monitor fish movement. A fish trap is also located here to allow fisheries personnel to collect adult brood fish to supply eggs to the Bodine and Mixsawbah hatcheries. Attraction water can be supplied to the lower end of this ladder to improve fish passage. Cost of this fish ladder was approximately \$1.1 million dollars. An additional \$200,000 (non-DNR funds) was spent on a small demonstration hydroelectric facility that was incorporated into the South Bend Fish ladder. Beginning this October, an 18-month project will begin to replace the demonstration turbine with a fully functional set of 10 turbines. This new hydroelectric facility will be adjacent to the fish ladder, funded by the University of Notre Dame, and be nearly completely concealed below grade.

Attendees will meet downstairs by the large glass doors overlooking the East Race Waterway.

# FRIDAY, TOUR B - STUDEBAKER AND HISTORY MUSEUMS TOUR

September 8<sup>th</sup> 1:45 – 2:45 (Tour B) – max: groups of 12 attendees (\$10.00 per person)

Matt Jones - Tour of the Studebaker and History Museums w/optional Oliver Mansion.

**Summary:** The Studebaker National Museum is a state-of-the-art, 55,000-square-foot facility that opened in October 2005. The building has three levels and features fully climate-controlled galleries and storage facilities to ensure the best possible care for the Collection. The Studebaker National Museum was designed by South Bend's own James Childs Architects and features several design elements from Studebaker's factory buildings. The Mission of The Studebaker National Museum is to honor and perpetuate the legacy of the rich industrial heritage of the South Bend area, through the display, interpretation, conservation and preservation of Studebaker vehicles, archives and other objects to enrich present and future generations. The Museum is intended to be a fitting memorial to men and women of our community whose vision, creativity and energy built the products that are today our industrial manufacturing heritage.

(please see: <a href="https://studebakermuseum.org/">https://studebakermuseum.org/</a>) The self-guided tour will involve the Studebaker and History Museums for up to the 5pm closing time.

Those wishing to continue into the Oliver Mansion guided tour should allow for an additional 45-minues for the first floor or 1-1/2 to 2 hours for all 3 floors. Start times for the full tour are 2pm and a 1st floor only tour at 3pm. Spaces are limited to 12 people per tour. Please RSVP early because this is a popular local attraction.

Attendees will drive / or walk to the museum (walk time is 19 minutes - .9 mile from the Century Center).

Please see: <a href="https://www.google.com/maps/place/Studebaker+National+Museum/@41.674838,-86.262168,15z/data=!4m5!3m4!1s0x0:0xffa6f6f17e193012!8m2!3d41.674838!4d-86.262168">https://www.google.com/maps/place/Studebaker+National+Museum/@41.674838,-86.262168,15z/data=!4m5!3m4!1s0x0:0xffa6f6f17e193012!8m2!3d41.674838!4d-86.262168</a>