The Lower Yahara River Trail
Phase One Planning and Design

Public Information Meeting
February 27th, 2014
The Lower Yahara River Trail

- Introductions
- Meeting Purpose
- Project Overview
- Planning Process History & Current Status
- **Overview of Major Planning and Design Considerations for the Environmental Report**
- Proposed Trail Alignment & Typical Section Update
- Remaining Project Timeline and Estimated Cost
- Future Operations and Maintenance
- Next Steps/QA
The Lower Yahara River Trail Meeting Purpose

- Refresh Public/Stakeholder Project Awareness & Status
- **Discuss Major Planning Considerations & Decisions Included within the Environmental Report**
- Present Preferred Alternative Alignment & Cross Sections
- Answer Questions, Listen to Comments
The Lower Yahara River Trail
Project History and Overview

- Trail Concept Originated 1995 from Village of McFarland during update to County POSP
- Support for the trail has steadily increased from 2007 to present.
Lower Yahara River Trail: Fish Camp County Park to Lake Kegonsa State Park

Legend
- State/Federal Land
- County Owned Land
- Village of Monona
- Future Acquisition Area

Proposed Lower Yahara Trail
Proposed Bike/Pedestrian Bridge

Scale: 1" = 300' - 0"
Original 2009 Stakeholder Oversight Committee

- Ken Lucht, WSOR
- Sue Josheff, WDNR
- Cami Peterson, WDNR
- Vicki Schaefer, WDOT
- Kim Johnson, Citizen Member
- Larry Nelson, City of Madison
- John Reimer, City of Madison
- Rob Phillips, City of Madison
- Rich Vela, City of Monona
- Arthur Ross, Bicycle Advocate
- Jeremy Balousek, Dane County
- Kevin Connors, Dane County
- Chris James, Dane County
- Pauline Boness, Village of McFarland
- Doug Wood, OCR
- Roger Breske, OCR
Planning Process History

- Fall 2007 Stakeholder Kickoff Meeting
- Scope of Project Expanded to Consider Water Flow, Navigation and Corridor Safety
- Spring 2008 Established Stakeholder Committee
- Summer 2008 Issued LYRT RFP
- Fall 2008 Hired Graef for Design Development
- Winter 2009 Began Conceptual Design Development
- Spring 2009 Expanded Graef Contract to PS&E
- May 2009 Completed Wetland Delineation, Boring Investigation
- June 2009, Public Information Meeting
- Summer 2009 Subsurface Borings at Lake Bed
Planning Process History Cont.

- 2009  Hydraulic Modeling of the Railroad Trestle
- October 2010 Awarded $2.9 million TE funds
- 2011 KJohnson Engineers Hired as WDOT Management Consultant (MC) for Design Review
- 2011 through Current
  - Floodplain Impact Analysis
  - Phase 1 & 2 Archaeological Investigations
  - Additional Topographic and Boundary Surveying
  - Ongoing WSOR Shared Use Discussions
  - Ongoing WDNR Shoreline/Wetland Impact Discussions
  - Ongoing Wisconsin Historical Society Discussions
  - Ongoing WDOT Archaeological Discussions
  - Additional Soil Borings
  - Alternative Alignment Number 7!
Current Phase 1 Lower Yahara River Trail Planning Team

- Steve Huberty, P.E., GRAEF, Project Manager
- Chris James, Dane County Parks, Project Manager
- Dan Windorski, P.E., GRAEF, Structural Engineer
- Bill Wuellner, P.E., CGC, Inc. (Borings)
- Bill Biesmann, P.E., KJohnson Engineers, WDOT Management Consultant
- Ian Chidister, FHWA, Environmental Program Manager
- Russ Anderson, WDNR, NR Region Program Manager
- Eric Heggelund, WDNR, Environmental Analysis and Review Specialist
- James Becker, WDOT, Archaeological Program Coordination
- Mark Dudzik, WDNR, Archaeologist
- Sherman Banker, Wisconsin Historical Society, Compliance Archaeologist
- Jennifer Haas, Great Lakes Archaeological Research Center
Major Planning & Design Considerations for the Environmental Report
Major Design Considerations
Wetlands

- All Swamp White Oak tree locations were surveyed and trail alignments were adjusted to minimize impacts
- Extensive boardwalking
- Limiting fill/at-grade path to upland areas & utilized existing bank berm profile.
- Minimal wetland disturbance (approximately 1.75 acres) at slope transitions and under boardwalks
- Trail will enhance awareness and appreciation of floodplain/wetland communities
Major Design Considerations
Aquatic Lakebed Impacts

- Approximately 2000’ linear feet of lakespan shoreline boardwalking is being proposed
- About ½ of the lakespan boardwalk will be completely over the water, the remainder partially
- Little to no impact to boaters.
- Lakespan boardwalk may actually protect against future shoreline loss from wind, wave, ice damage.
Major Design Considerations
Archaeological

- Lake Farms Archaeological District listed on National Register of Historic Places (NRHP) in 1978
- Phase 2 archaeological field investigations in 2012 resulted in additional lands being eligible for designation on the NRHP in 2013 within McDaniel Park.
- Wisconsin Native American tribes were sent project notification information in 2009 and 2012; and were invited to Consultation meetings in Dec. 2013 and January 2014
- James Becker, WDOT Archaeological Program Manager, had informal discussions with members of the Ho Chunk Nation related to the scope of the project and pending Consultation meetings.
Major Design Considerations Archaeological

- Constructing boardwalk throughout the entire archaeological district area was discussed.
- Trail user safety was the primary reason why boardwalk is not being proposed throughout the entire Lake Farm archaeological district.
Major Design Considerations
Archaeological-Data Recovery Plan

- Great Lakes Archaeological Research Center/UW Milwaukee will be conducting hand dug field investigations in areas of known concentrations prior to construction.
- Artifacts uncovered will be curated at a UW Milwaukee facility that meets Federal storage standards.
- GLARC will provide monthly reports on findings and will facilitate several on site progress meetings to present findings.
Major Design Considerations
Archaeological-Data Recovery Plan

- GLARC will provide a comprehensive written report of all findings.

- GLARC will publish an article of findings in a scholarly journal and provide a public lecture at a forum to be determined. (Heritage Center?)
Major Design Considerations
Archaeological-Data Recovery Plan

- Dane County Parks will work with a consultant to develop updated educational and interpretive materials based on findings of the final report.
Reports of artifacts date back to the 1920s, but it wasn’t until the late 1970s that archaeologist Philip H. Salkin and students from the University of Wisconsin conducted true studies. They identified the location of 32 prehistoric sites and assessed their importance. The archaeologists completed two large-scale excavations at sites which were displaced as the current park was constructed. All other sites were left undisturbed.

The research studies proved the area’s archaeological significance and prompted the creation of the Lake Farm Archaeological District, which is a member of the National Register of Historic Places. During the archaeological studies, the team drew numerous maps of artifact locations and other features, and a complete photo record was kept. Meticulous data collection is crucial, because an archaeological site is partially destroyed during excavation, even when conducted by professionals.

If you ever find an archaeological artifact, please leave it in the position you found it and report it to park staff. It is illegal to keep artifacts from the Lake Farm Archaeological District.
Prehistoric Technology?

The prehistoric occupants of this park used a wide variety of local materials to create tools, ceremonial and decorative items. Pottery was crafted by coiling ribbons of clay around a base. The clay was smoothed and decorated by impressions from textiles or cordage, and then fired in a ground pit to produce durable pots and jars.

Stone tools were made using percussion and pressure-flaking techniques (also known as flint-knapping). The first technique incorporated the reduction of chert (flint) to a useable size or the removal of larger, useful flakes. Pressure-flaking was used to pry off smaller flakes to thin the implement or finish its edge. Scrapers and "flesherds" were made out of stone, bone or antlers and were used to clean hides. Hides were cut and sewn into clothing, and plant fibers were woven into mats or twisted into rope.
Major Design Considerations
Floodplain

- A floodplain analysis and permit application was completed and submitted to Dane County Planning and Development.

- The project was found to conform to Dane County Code of Ordinance, Chapter 17, Floodplain Regulations and a permit has been issued.
Major Design Considerations Railroad

- Wisconsin & Southern Railroad Co. and Dane County Parks staff met between 2007 and 2013 to discuss the possibility of a shared use corridor for portions of the LYRT.

- Changes to WSOR/WATCO insurance requirements and lack of coverage for RR incidents under the Dane County insurance policy led to an eventual relocation of the trail corridor outside of the existing WSOR/WDOT right of way.

- Narrowness of corridor made separation challenging!
Major Design Considerations
Path Width

- WDOT recommends 10’ minimum width with 2’ wide shoulders for off road paths in their Wisconsin Bicycle Facility Design Handbook.
- Areas of higher and mixed use may “warrant increasing path width to 12’ or even 14’.”
- “Paths in popular parks, along regional shorelines or near large population centers and universities can easily generate high levels of mixed use traffic…”
Major Design Considerations
Boardwalk Width

- WDOT recommends 12’ minimum inside width from rail to rail in their Wisconsin Bicycle Facility Design Handbook.

- 14’ inside width from rail to rail is their desired standard.
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Major Design Considerations
Trail Width*

- Boardwalk widths are proposed at 12’ vs. 14’ wide to minimize footprint at wetlands and over water.
- At grade paved sections 10’ wide with 2’ shoulders to minimize wetland/archaeological impacts.

*Minimizing impacts to water, wetlands and archaeological resources and maintaining safe distance from the active rail line were primary planning considerations.
The preferred alternative alignment is #7.

Location of swamp white oak trees, initial archaeological field tests, receding shorelines, lack of current survey data and uncertainty of a suitable/acceptable shoreline location has resulted in many updates to the alignment!
LAKE SPAN BOARDWALK WITH PRE-FAB STEEL TRUSS

WETLAND BOARDWALK WITH WOOD FRAMING
Section 106 Initial Approval: July, 2013
Consultation Meeting 1: December, 2013
Consultation Meeting 2: January / February 2014
Public Information Meeting End of February, 2014
Environmental Report Submittal End of February, 2014
Draft MOA: March, 2014
Final MOA Approval: April, 2014
Approved Environmental Report: May, 2014
60% Preliminary Plan: April/May, 2014
Approved DSR: June, 2014
Draft PS&E: September, 2014
Final PS&E: November, 2014
WDOT Bid Let: March, 2015
Construction May 1, 2015
Estimated Construction Costs

Total Estimated Project Cost: $5.4 million

Estimated Federal Funds (Pending TAP approval) $4 million

Dane County Funds $1.4 million
Future Operations and Maintenance

Will Dane County plow snow on the Lower Yahara River Trail?
Future Operations and Maintenance

Will Dane County Charge a Trail Pass Fee for the Lower Yahara River Trail?
We Don’t Know......

• Continue to monitor winter use on Capital City Trail
• Explore sustainable bike trail maintenance ideas with MPO through their 2014 Bicycle Transportation Plan
• Solicit ideas from the bicycle community
What We Do Know

• Dane County Parks now has nearly 20 miles of off road bicycle trails, the system has nearly doubled in the past 10 years.
• Commuter cyclist numbers are on the rise.
• Dane County has spent more than $12 million dollars on planning, acquisition and development of bicycle trails since 2000.
Current Maintenance Strategies

- State Trail Pass Fees (CCT only)
- Dane County User Fees (Mt. Bike, XC Ski, Equestrian, Lake Access, Dog Parks, Disc Golf)
- Volunteer Trail Maintenance
- Fund Raising Events
- Volunteers sell trail passes, keep revenue, maintain trails.
Final Maintenance Thoughts

We are looking for ideas on how everyone can sustain ongoing O/M costs for the ever growing off road bike trail network!
It’s Time for our Patent Pending Public Listening Session!

Please…

- Respect your allotted time limit
- Do not interrupt or interject during others comments
- Do not laugh at somebody else’s idea or comment
- Refrain from talking while others are speaking

- We’ll be here as long as we can afterward to answer additional questions.
Questions?

For more information contact:
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608-224-3763

Thank You!