

Wisconsin Department of Natural Resources
SWIMS Project Summary

General Project Information

Project ID: RP-257-14

Name: COLUMBIA COUNTY: Spring Creek WQ Analysis & Modeling

Type: River Grant

Subtype: River Planning Grant

Status: COMPLETE

Start Date: 7/1/2013

End Date: 12/31/2017

Purpose: Description of products or deliverables are as follows:
Model Identification
* Overview of possible river models, contrasting model strengths and weaknesses.
* Selection of an appropriate river model for water quality analysis and adaptive management follow up modeling will be selected for use on Spring Creek.
Build out Scenarios
* Two sets of products will be established related to the baseline land use inventory. The first product is a set of maps depicting the existing conditions of the surface watersheds. The maps will include existing land uses, tax parcel boundaries, orthophotography, and environmental constraints. The second product will be a set of statistics that measure the percent and acreages of developed and undeveloped land uses as well as environmental constraints.
* A review of the existing regulatory framework will be compiled in a brief report that summarizes regulatory findings for the ground and surface watersheds and by jurisdiction. If significant differences are found among jurisdictions, a matrix will be compiled to illustrate the differences.
* A set of maps and set of statistics will be compiled for a build out assessment of the surface watershed. The maps will detail areas that are available and unavailable for future development. Statistics will identify how many acres are available for future development and how many additional development units are possible with existing regulations. The change in potential impervious surface will be calculated and displayed on a map.
* Statistics will be derived that determine how much change in phosphorus loading is possible for the surface watershed based on the build-out scenarios.
* Final report

Objective:

Comments: Grantee is COLUMBIA COUNTY

Outcome:

Study Design:

QA Measures:

People

Name	Role	Status	Start Date	End Date	Organization	Comments
Columbia County Land & Water C	GRANT_RECIPIENT	ACTIVE	7/1/2013	12/31/2014	Columbia County Land & Water Conservation Dept	

Project Statuses

Date	Reported By	Status	Comments
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Actions

Wisconsin Department of Natural Resources SWIMS Project Summary

Action	Detailed Description	Start Date	End Date	Status
Project Deliverable	<p>Description of products or deliverables are as follows: Model Identification * Overview of possible river models, contrasting model strengths and weaknesses. * Selection of an appropriate river model for water quality analysis and adaptive management follow up modeling will be selected for use on Spring Creek. Build out Scenarios * Two sets of products will be established related to the baseline land use inventory. The first product is a set of maps depicting the existing conditions of the surface watersheds. The maps will include existing land uses, tax parcel boundaries, orthophotography, and environmental constraints. The second product will be a set of statistics that measure the percent and acreages of developed and undeveloped land uses as well as environmental constraints. * A review of the existing regulatory framework will be compiled in a brief report that summarizes regulatory findings for the ground and surface watersheds and by jurisdiction. If significant differences are found among jurisdictions, a matrix will be compiled to illustrate the differences. * A set of maps and set of statistics will be compiled for a build out assessment of the surface watershed. The maps will detail areas that are available and unavailable for future development. Statistics will identify how many acres are available for future development and how many additional development units are possible with existing regulations. The change in potential impervious surface will be calculated and displayed on a map. * Statistics will be derived that determine how much change in phosphorus loading is possible for the surface watershed based on the build-out scenarios. * Final report</p>	7/1/2013	12/31/2017	COMPLETE

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Grant Awarded	Description of products or deliverables are as follows: Model Identification * Overview of possible river models, contrasting model strengths and weaknesses. * Selection of an appropriate river model for water quality analysis and adaptive management follow up modeling will be selected for use on Spring Creek. Build out Scenarios * Two sets of products will be established related to the baseline land use inventory. The first product is a set of maps depicting the existing conditions of the surface watersheds. The maps will include existing land uses, tax parcel boundaries, orthophotography, and environmental constraints. The second product will be a set of statistics that measure the percent and acreages of developed and undeveloped land uses as well as environmental constraints. * A review of the existing regulatory framework will be compiled in a brief report that summarizes regulatory findings for the ground and surface watersheds and by jurisdiction. If significant differences are found among jurisdictions, a matrix will be compiled to illustrate the differences. * A set of maps and set of statistics will be compiled for a build out assessment of the surface watershed. The maps will detail areas that are available and unavailable for future development. Statistics will identify how many acres are available for future development and how many additional development units are possible with existing regulations. The change in potential impervious surface will be calculated and displayed on a map. * Statistics will be derived that determine how much change in phosphorus loading is possible for the surface watershed based on the build-out scenarios. * Final report	7/1/2013	12/31/2017	COMPLETE
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Rivers Planning Grant	Description of products or deliverables are as follows: Model Identification * Overview of possible river models, contrasting model strengths and weaknesses. * Selection of an appropriate river model for water quality analysis and adaptive management follow up modeling will be selected for use on Spring Creek. Build out Scenarios * Two sets of products will be established related to the baseline land use inventory. The first product is a set of maps depicting the existing conditions of the surface watersheds. The maps will include existing land uses, tax parcel boundaries, orthophotography, and environmental constraints. The second product will be a set of statistics that measure the percent and acreages of developed and undeveloped land uses as well as environmental constraints. * A review of the existing regulatory framework will be compiled in a brief report that summarizes regulatory findings for the ground and surface watersheds and by jurisdiction. If significant differences are found among jurisdictions, a matrix will be compiled to illustrate the differences. * A set of maps and set of statistics will be compiled for a build out assessment of the surface watershed. The maps will detail areas that are available and unavailable for future development. Statistics will identify how many acres are available for future development and how many additional development units are possible with existing regulations. The change in potential impervious surface will be calculated and displayed on a map. * Statistics will be derived that determine how much change in phosphorus loading is possible for the surface watershed based on the build-out scenarios. * Final report	7/1/2013	12/31/2017	COMPLETE
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Watershed Mapping or Assessment	Description of products or deliverables are as follows: Model Identification * Overview of possible river models, contrasting model strengths and weaknesses. * Selection of an appropriate river model for water quality analysis and adaptive management follow up modeling will be selected for use on Spring Creek. Build out Scenarios * Two sets of products will be established related to the baseline land use inventory. The first product is a set of maps depicting the existing conditions of the surface watersheds. The maps will include existing land uses, tax parcel boundaries, orthophotography, and environmental constraints. The second product will be a set of statistics that measure the percent and acreages of developed and undeveloped land uses as well as environmental constraints. * A review of the existing regulatory framework will be compiled in a brief report that summarizes regulatory findings for the ground and surface watersheds and by jurisdiction. If significant differences are found among jurisdictions, a matrix will be compiled to illustrate the differences. * A set of maps and set of statistics will be compiled for a build out assessment of the surface watershed. The maps will detail areas that are available and unavailable for future development. Statistics will identify how many acres are available for future development and how many additional development units are possible with existing regulations. The change in potential impervious surface will be calculated and displayed on a map. * Statistics will be derived that determine how much change in phosphorus loading is possible for the surface watershed based on the build-out scenarios. * Final report	7/1/2013	12/31/2017	COMPLETE
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Water Quality Modeling	Description of products or deliverables are as follows: Model Identification * Overview of possible river models, contrasting model strengths and weaknesses. * Selection of an appropriate river model for water quality analysis and adaptive management follow up modeling will be selected for use on Spring Creek. Build out Scenarios * Two sets of products will be established related to the baseline land use inventory. The first product is a set of maps depicting the existing conditions of the surface watersheds. The maps will include existing land uses, tax parcel boundaries, orthophotography, and environmental constraints. The second product will be a set of statistics that measure the percent and acreages of developed and undeveloped land uses as well as environmental constraints. * A review of the existing regulatory framework will be compiled in a brief report that summarizes regulatory findings for the ground and surface watersheds and by jurisdiction. If significant differences are found among jurisdictions, a matrix will be compiled to illustrate the differences. * A set of maps and set of statistics will be compiled for a build out assessment of the surface watershed. The maps will detail areas that are available and unavailable for future development. Statistics will identify how many acres are available for future development and how many additional development units are possible with existing regulations. The change in potential impervious surface will be calculated and displayed on a map. * Statistics will be derived that determine how much change in phosphorus loading is possible for the surface watershed based on the build-out scenarios. * Final report	7/1/2013	12/31/2017	COMPLETE
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Details: Parameter	Value/Amount	Units	Comments
BMP Implementation			
I & E Activities			
PCBs			
Permit Modification			
Products Developed: Stormwater Plan			
Protective Areas: Feet of bank protected			
Protective Areas: Feet of bank protected			
Protective Areas: Feet of bank protected			
Report Writeup			
Stormwater Goals Addressed: Protective areas			
Stormwater Goals Addressed: Reduce TSS			

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Details: Parameter	Value/Amount	Units	Comments
Streambank & Shoreline Protection: Pollutant load reduction			
Streambank & Shoreline Protection: Units			
Streambank & Shoreline Protection: Pollutant load reduction			
Streambank & Shoreline Protection: Units			
Streambanks: Feet of bank protected			
Streambanks: Feet of bank protected			
Streambanks: Feet of bank protected			
Total Nitrogen			
Total Phosphorus			
Total Suspended Solids			
Watershed Outreach, Planning			

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Monitoring Stations

Station ID	Name	Comments
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Assessment Units

WBIC	Segment	Local Name	Official Name
1260600	1	Lake Wisconsin	Lake Wisconsin
1261900	1	Lodi Creek	Spring Creek

Lab Account Codes

Account Code	Description	Start Date	End Date
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Forms

Form Code	Form Name
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Methods

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Method Code	Method Description
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Fieldwork Events

Start Date	Status	Field ID	Station ID	Station Name
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Documents

Title	Description	Author	Published	Comments
Spring Creek Water Quality Analysis and Modeling	River Planning Grant Report RP-257-14	Columbia County Land and Water Conservation	2/9/2018	
Spring Creek Watershed Build Out Analysis		Columbia County Land and Water Conservation	2/1/2017	

Budget

Combined Budgets:

Combined WSLH:

Combined Total: \$0.00

Funding

Organization	Source	Type	Amount	Start Date	End Date
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