



# The River Mile: A Student Inquiry Approach to Watershed Health of the Columbia River Watershed

How do we simultaneously use and protect our watershed?

## Introductory Webinar

1-866-713-5673

Passcode 485515

Please announce yourself  
and your school



# Lake Roosevelt

National Park Service  
U.S. Department of the Interior



Lake Roosevelt  
National Recreation Area

## Welcome and Introductions!

Janice Elvidge  
Education Specialist  
National Park Service  
Lake Roosevelt National Recreation Area  
2005-present  
Grand Coulee, Washington





2007-08 School Year

Created The River Mile Education Program

**Our vision is** to link classrooms with real world laboratories in their own “backyards” where they collaborate with National Park Service staff and other natural resource agencies to collect, analyze, interpret and share ecosystem data throughout the Columbia River Watershed. Together they form a network of resource managers, scientists, environmental educators, teachers and students exploring the essential question “How do we simultaneously use and protect our watershed?”





# The River Mile Program Goals

- To create and maintain The River Mile network
- Encourage an appreciation for the natural world and ecosystem processes
- Instill critical thinking skills and abilities related to human interactions with the environment
- Build connections with National Parks and the watershed to increase stewardship
- Develop a positive relationship between the park, other land management agencies and the community
- Increase community involvement in the management of the park and watershed
- Build a connection between school curriculum and park resources
- Provide resources and training in inquiry and science



# Essential Question



How do relationships between components of an ecosystem in a watershed affect water quality?

The Model

# The River Mile Student Programs





# The R Student

## Habitat Observation





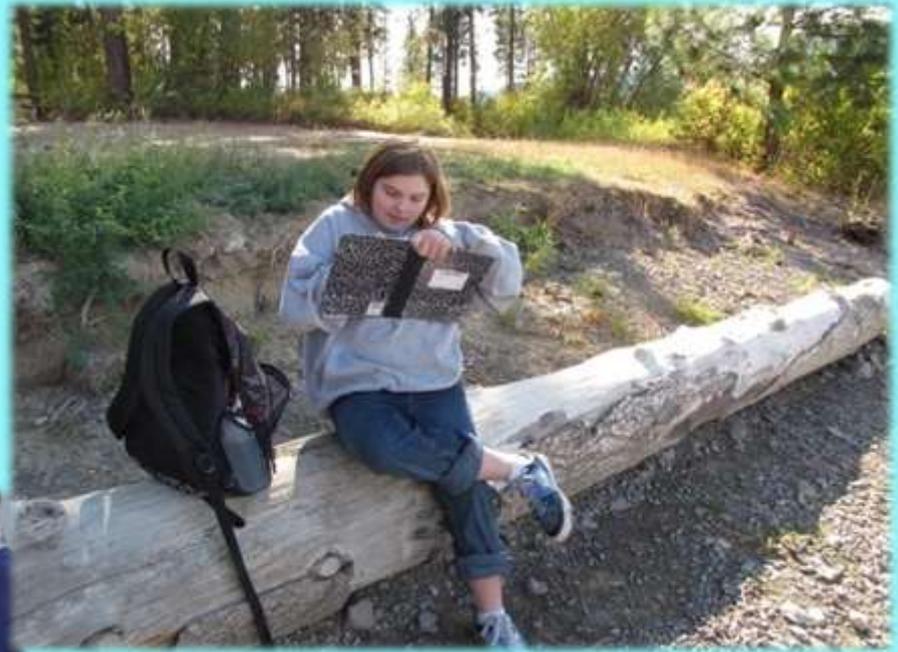
**Sit Spot**

# Exploration









Inquiry Field Investigations

**Columbia School 4<sup>th</sup>  
Grade**

Wilbur High School







Project





# Professional Development













**Inventories, Monitoring and Assessment**  
Transects, plots and points



## Expansion Workshop 2012



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### The



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### M

### Cedar

Learn about and expl  
Coulee Dam from reg  
lives here now that w  
geology, culture and

Speakers include: Jac  
Colville Confederated  
Roosevelt National R

**Open to teach**



### IRY

credit.

**Presented by:**  
Karen Dvornich, Director  
NatureMapping Program

Register for 1 or all

LESSON PLANS  
FOR GRADES K-8

KAREN DVORNICH, DIANE PETERSEN, KEN CLARKSON



# Additional Program Options

- Student Science Symposium
- High School Seminar Series





**Student Science Symposium**



School Keynote Speak



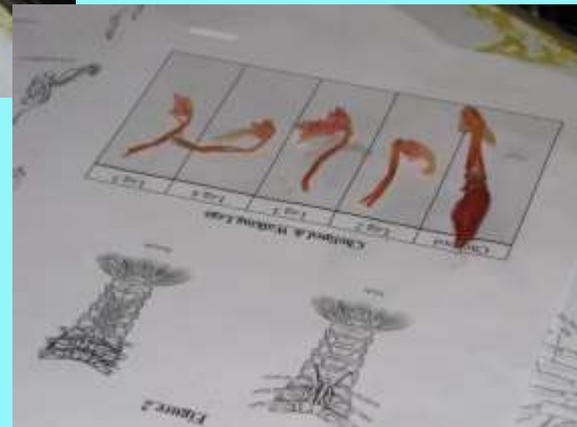
# The River Mile High School Seminar Series



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Bureau of Reclamation Spokane Tribe of Indians

Colville Confederated Tribes Fish and wildlife



Jack Nisbet

# The River Mile Net

Spokane Audubon Society



Lake Roosevelt Forum

Pacific Education Institute

US Army Corps of Engineers



Bureau of Indian Affairs

Native Plant Nursery

US forest Service

Washington State Department of Ecology





# The River Mile Network



[The River Mile Participating Schools](#)

[The River Mile Website](#)



# How Do I Participate?



- Professional Development
  - Field Investigations Workshop
  - ArcGIS
  - Crayfish Study
  - Fall Workshop
  - Project WET, WILD, Learning Tree
- ArcGIS Map of site and project
- Webpage for your project
- Participate in networking
  - Facebook
  - Newsletter
  - Monthly Webinar
  - Blogs





# Participation

- Field Visits – minimum 2 with students
  - Initial descriptive site visit
  - Field investigation you design
  - Crayfish study
- Data collection
  - Water
  - Who uses the site and how
    - Plants
    - Animals
    - Humans
- Data sharing
  - ArcGIS Explorer On-line
  - Reports
    - Newsletter articles
    - Webinars
  - NatureMapping
- Utilize Facebook, Ning, Yammer, Blogs and other social/professional networking tools as they are available
- Work together to keep it going
  - Assist with reports and grant applications
  - Provide data as needed
  - Conduct assessments
- Additional Activities
  - High School Seminar
  - Student Science Symposium
  - Other ideas



# Getting Started

1. If you don't already have an appropriate site (with water that eventually gets into the Columbia River) then identify several sites that might work
2. Identify the agencies/organizations that manage these sites
3. List the pros and cons of each site as an outdoor classroom  
Select a site
4. Contact the managing agency/organization and discuss what you want to do and obtain permission to use the site
5. Write a description of the site
6. Use on your webpage
7. Develop map of your site and for your project
8. Submit participant registration form
9. Participate in Training
10. Share your experiences and data



# The River Mile



Q & A