

# Educating for Systems Thinking

## Applied to Environmental Literacy and STEM

### A pair of Summer 2015 workshops

**Level A: Monday, August 3<sup>rd</sup>**

**Level B: Tuesday, August 4<sup>th</sup>**  
(Prerequisite is Level A)

**Location: Grant High School, library**  
2245 NE 36th Ave, Portland



**Featured Presenter:**

**Mary Scheetz**  
**Waters Foundation**

**Purpose:** To make systems thinking tools relevant to educators.

#### Attendees will learn:

- How to utilize systems thinking tools and concepts to deepen student understanding within their particular subject area.
- How to address the systems thinking content strand of the Oregon Environmental Literacy Plan, and how it supports STEM.

**Registration and details:** <http://onrep.forestry.oregonstate.edu/workshops>

- Free for formal and non-formal K-12 educators / administrators.\*
- Register early, space is limited.

**Level A:** Participants will develop an awareness of systems thinking concepts and tools (such as Habits of a Systems Thinker, Behavior Over Time Graphs, connection circles, “Fixes that Backfire” archetype, iceberg, feedback loops). They will begin to analyze systems with these tools, using exercises that can be repeated in the classroom. The Oregon Environmental Literacy Plan will be introduced and participants will consider how they can utilize the systems thinking tools to address the Plan’s learning strands, and STEM.

**Level B:** *Attendance of a Level A workshop is a prerequisite.*

Participants will become more deeply acquainted with the tools and concepts introduced in Level A, and how these connect to the Oregon Environmental Literacy learning strands. They will expand their systems thinking toolbox with additional archetypes, feedback loops and an intro to dynamic computer modeling. They will report out about their progress using the tools introduced in Level A, and will have opportunity for collaborative planning.

**About the presenter:** Mary Scheetz has over 40 years of experience as an innovative teacher, administrator and project director and is currently a trainer and consultant working with the Waters Foundation Systems Thinking in Schools Team.

**Additional Fall Series:** A 2<sup>nd</sup> set of workshops will take place in Corvallis, Oct. 16 & 17, 2015.

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**Presented by:** Oregon Natural Resources Education Program, in collaboration with Portland Public Schools.