

TMDL Program

Overview and results from NSTEPS in Oregon

May 25, 2017

Regional Nutrients Technical Assistance Group
Webinar on Nutrients and Harmful Algae

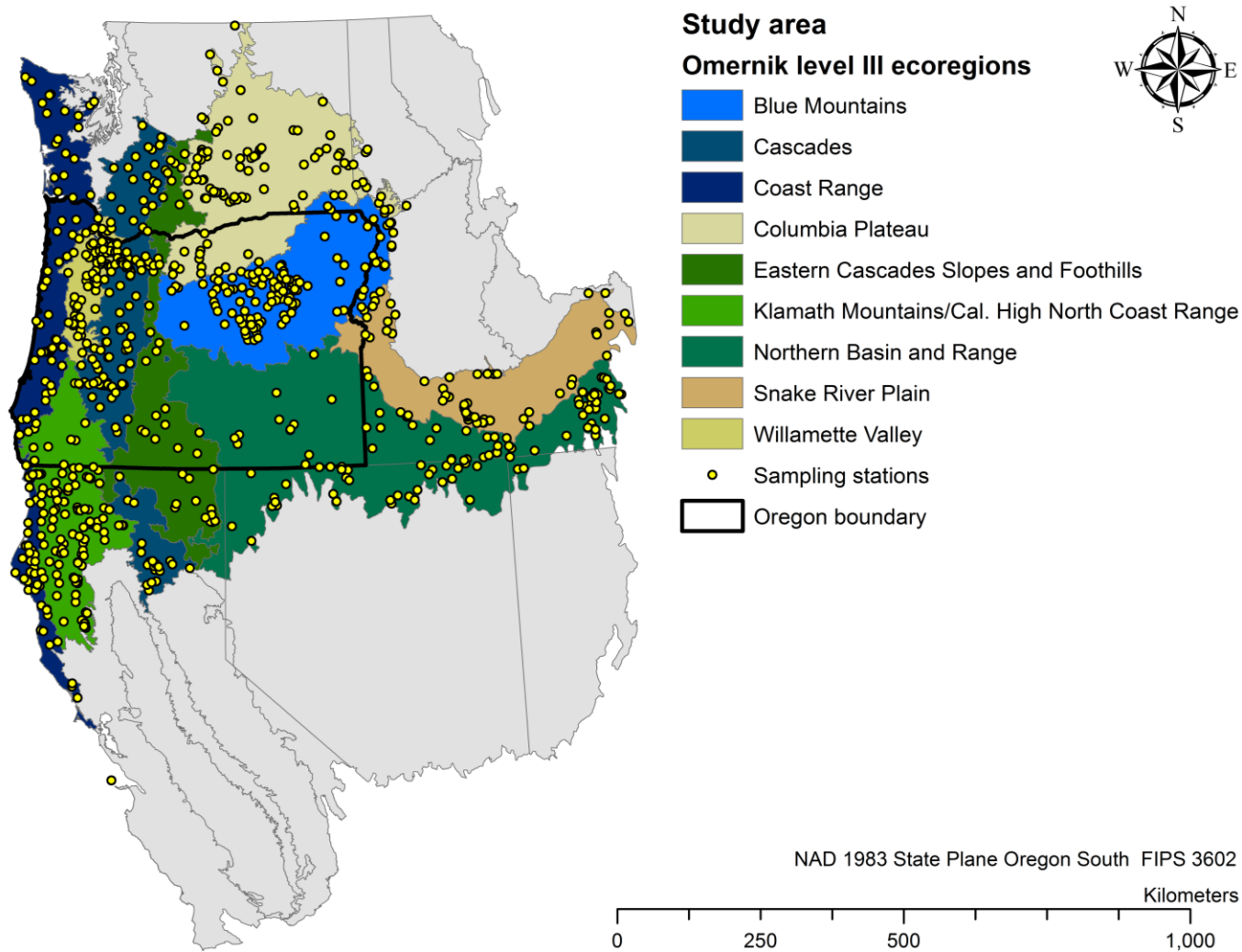
Oregon NSTEPS Project Team

- Oregon DEQ: Dan Sobota, Shannon Hubler, Bonnie Lambe
- EPA: Rochelle Labiosa, Jacques Oliver
- Tetra Tech: Mike Paul, Diane Allen

Oregon NSTEMPS Objectives

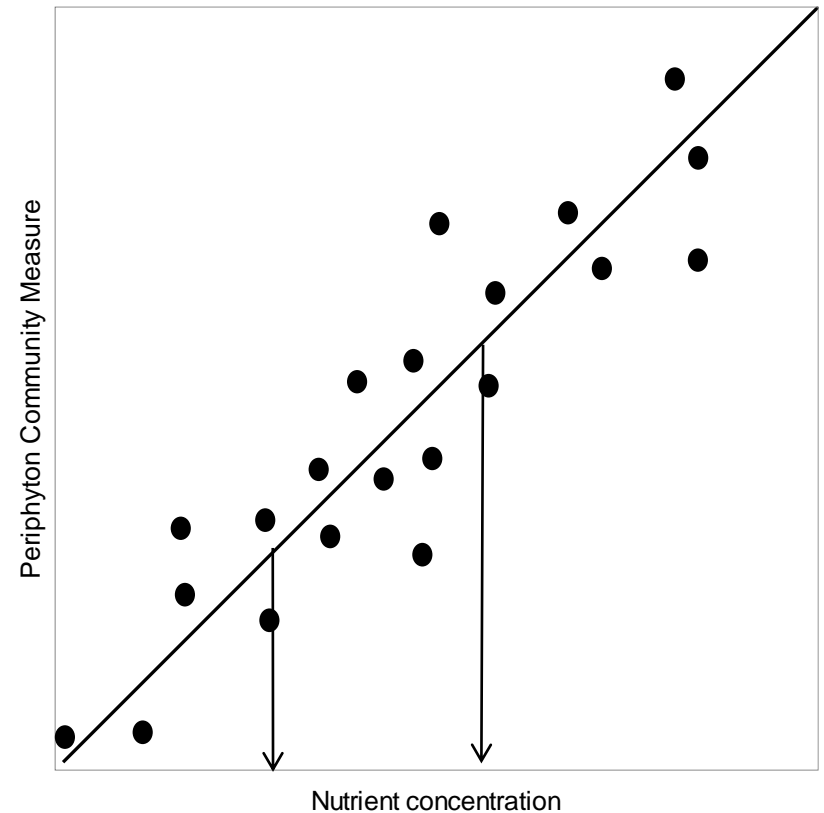
- Develop quantitative models linking periphyton community composition with nutrient concentrations (TN and TP)
- Link periphyton-nutrient models to dissolved oxygen, pH, and chlorophyll a

Study region

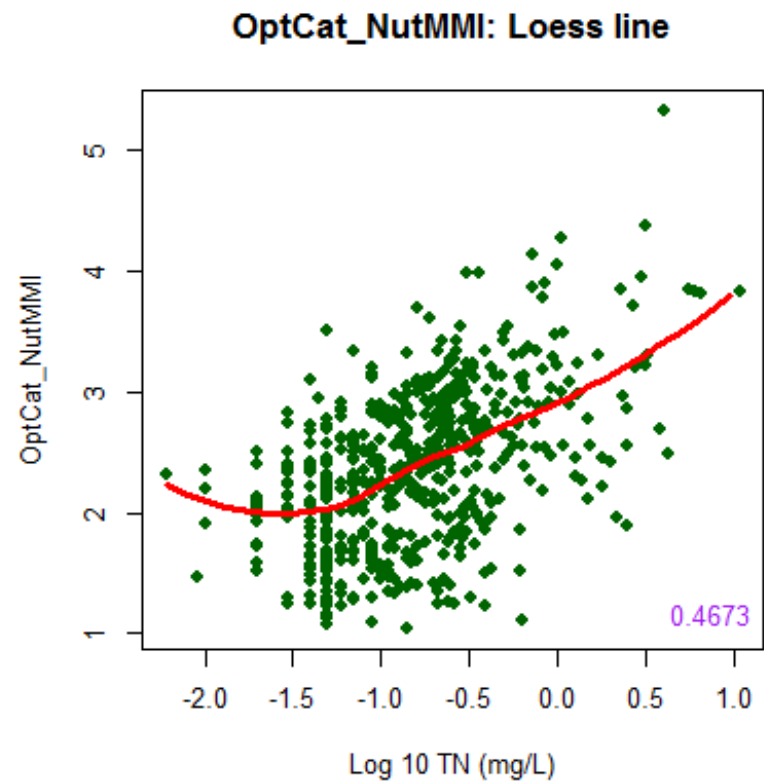
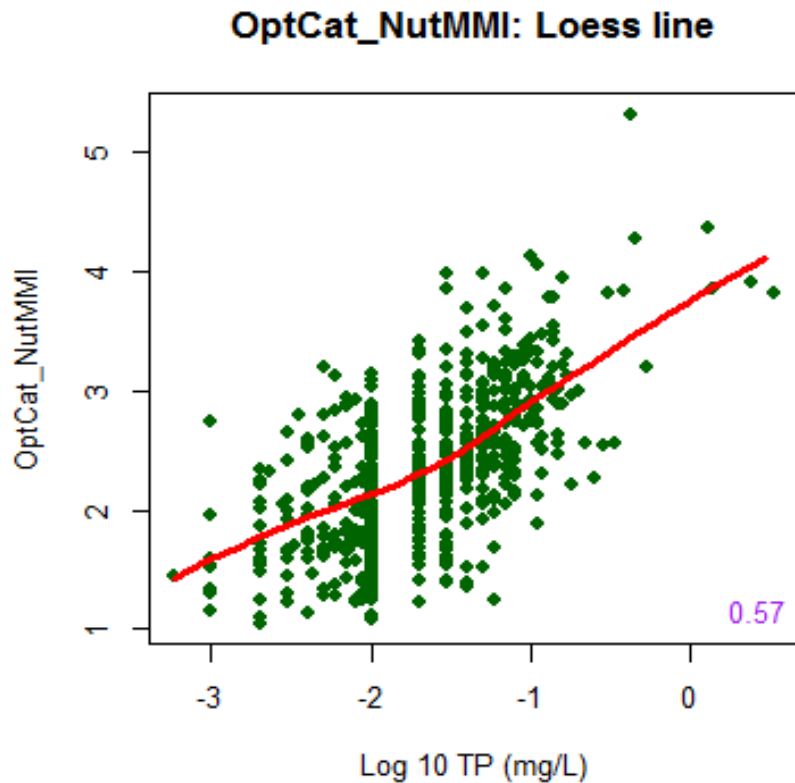


Methods

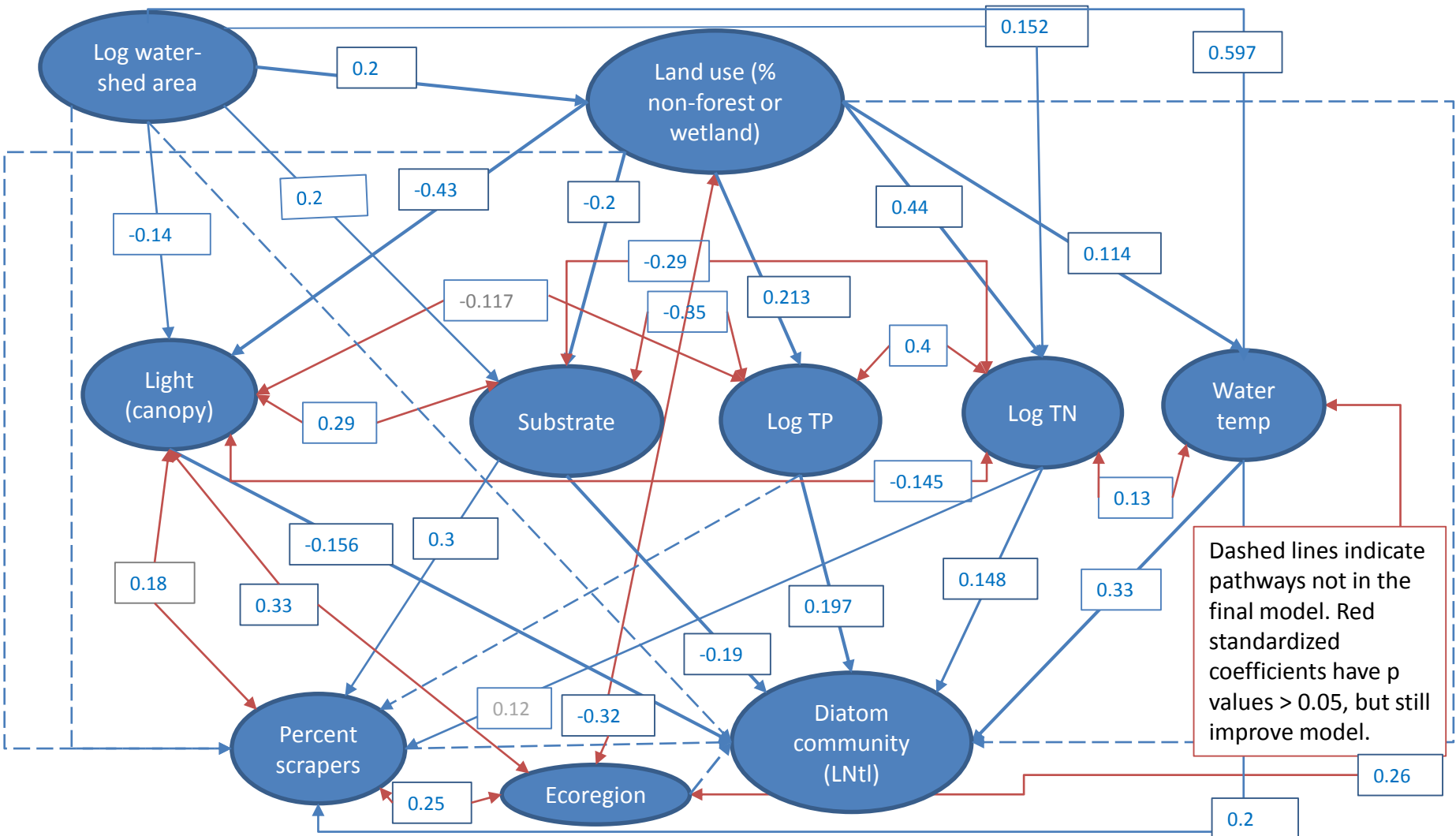
- Compile periphyton and nutrient data
- Develop correlative models
- Use SEM to evaluate interactions and other factors



Periphyton-nutrient correlations



Structural Equation Model



Conclusions and next steps

- Periphyton community indices correlate to nutrient concentrations in Oregon
- SEM allows us to better understand interactions with other factors
- Still need to link with regulated water quality parameters (e.g., dissolved oxygen)

Questions?

Documents can be provided upon request in an alternate format for individuals with disabilities or in a language other than English for people with limited English skills. To request a document in another format or language, call DEQ in Portland at 503-229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696; or email deqinfo@deq.state.or.us.