- All Human activity is part of complex webs of social and environmental relationships
- Differences in nature-culture relations begin at a young age
- Innovative solutions for environmental issues requrires bringing together diverse ways of knowing

Complex Socio-Ecological Systems

Understanding & Reasoning

Decision-making

- Field-based activities that focus on observations of same phenomena in places over time
- Data collection; tracking patterns & changes over time & place
- Classroom activities that focus on developing questions based on observations & wonderings
- Leveraging discussion practices toward socio-ecological systems thinking

Nature-culture relations

Culture & learning

Family & Community

Place

STUDENT LEARNING & SENSE-MAKING

Field-based Science Learning

Observing, Wondering, & Question Asking

Data Collection, Modeling, & Explanations

Classroom Discourse & Ethical Deliberating

- Families as participants in children's learning
- Drawing on family & community knowledge systems
- Making models based on integration of family/ cultural knowledge/ practices & scientific data

Power & Historicity





SEASONAL STORYLINE FOR FIELD-BASED SCIENCE EDUCATION

Why do Seasons matter?

Place driven co-design with children, families, community & educators

