Using Plant Associations from FRIS Data to Support Ecosystem-Based Management

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Project Objectives

- Provide DNR managers with a common language to describe forest ecosystems.
- Provide a framework for organizing ecological information and management experience about ecosystems.
- Promote a better understanding of forest ecosystems and their interrelationships.
- Improve our ability to plan, prescribe, and monitor site-specific treatments.

Plant Associations: What are they?

ABLA/VASC

TSHE/POMU

TSHE/LYAM

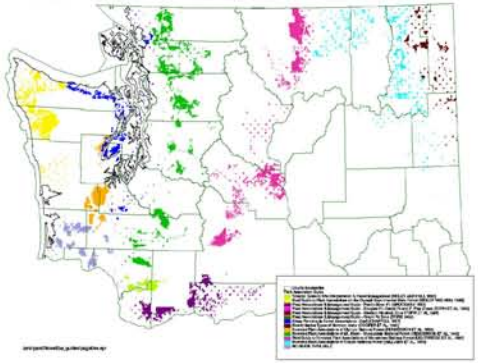
TSHE/OXOR

PISI/MADI

ABLA/CARU

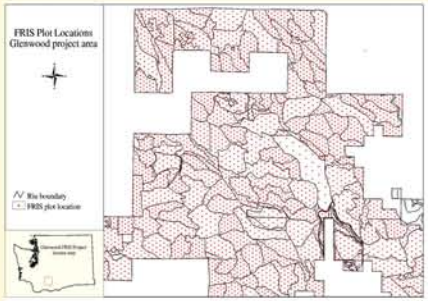
- Defined in the field using a plant association key or guide.
- Consists of an overstory and understory component.
- Names abbreviated from the first two letters of genus and species.
- Thirteen different guides used for FRIS projects in Washington. (see map, below)

Statewide FRIS Plant Association Guide Use

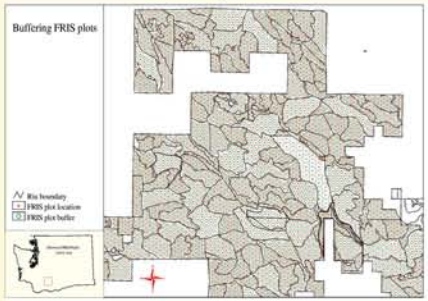


Steps to creating statewide Plant Association layer: (Glenwood example)

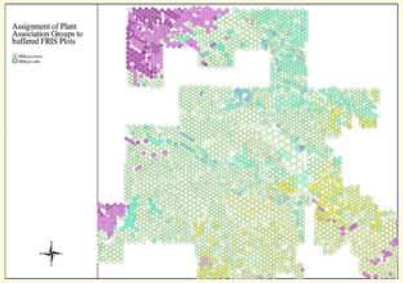
Step 1. Collect plant association data (DNR statewide FRIS project).



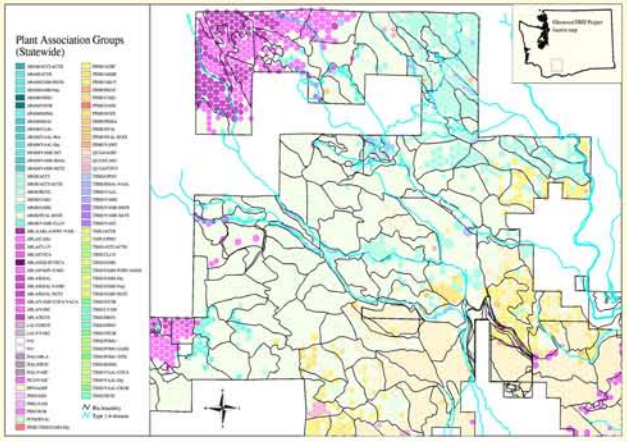
Step 2. Buffer each FRIS plot using Arc "regionbuffer" command.



Step 3. Assign a Plant Association Group to each buffered region subclass.



Step 4. Incorporate statewide Plant Association Group layer into Forest Resources FRIS data processing procedure. Data layer is currently available for DNR uses as an Arcview shapefile or an Arc regions cover.



Applications and Uses

Planning:

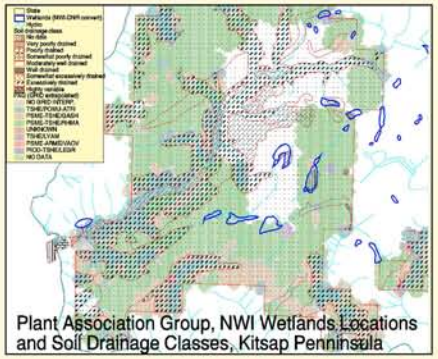
- Landscape planning templates require and ecological context. FRIS-derived plant associations will provide the best available data to landscape planners at multiple scales.

Science, Monitoring and Research:

- Plant associations provide required data for site-specific growth and yield modeling and are one link that allows FRIS data to interface with the Forest Vegetation Simulator (FVS).
- Plans that are currently in development utilize statistical blocking of HCP monitoring sites by ecosystem type to allow more specific interpretations and conclusive analysis.

Local Land Management:

- Silvicultural uses, such as future planting, vegetation management and intermediate treatments can be anticipated, based on the specific vegetation and productivity of sites.
- As a compliment to existing hydrology data. Wetlands not on the National Wetlands Inventory are plainly visible below, based on plant association.



Plant Association Group, NWI Wetlands Locations and Soil Drainage Classes, Kitsap Penninsula

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