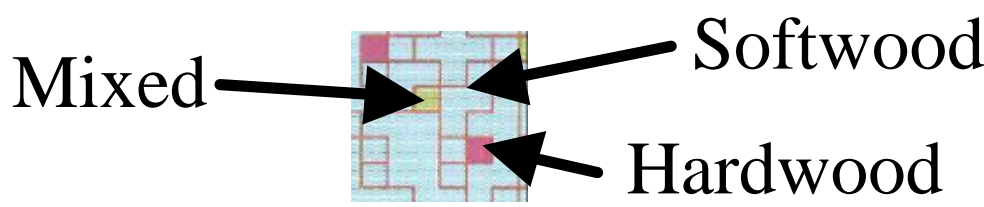


# Spatial Units used in CLAMS Simulations

Coastal Landscape Analysis and Modeling Study; College of Forestry, Oregon State University, USDA Forest Service, Pacific Northwest Research Station, Corvallis, OR; Oregon Department of Forestry

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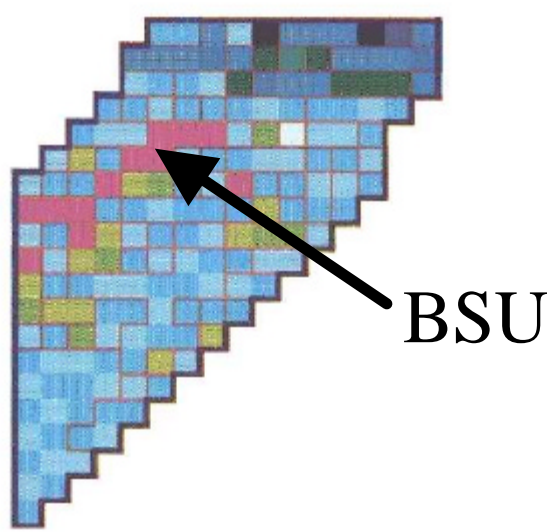
## Basic Simulation Unit (BSU)



These units can be as small as a pixel, and as large as several acres. They average about 0.67 acres.

They are aggregations of 25m pixels which are adjacent to each other, and have exactly the same characteristics (slope class, vegetation class, distance from stream class, etc.). Management prescriptions, although identified at the parcel level, are applied to these units.

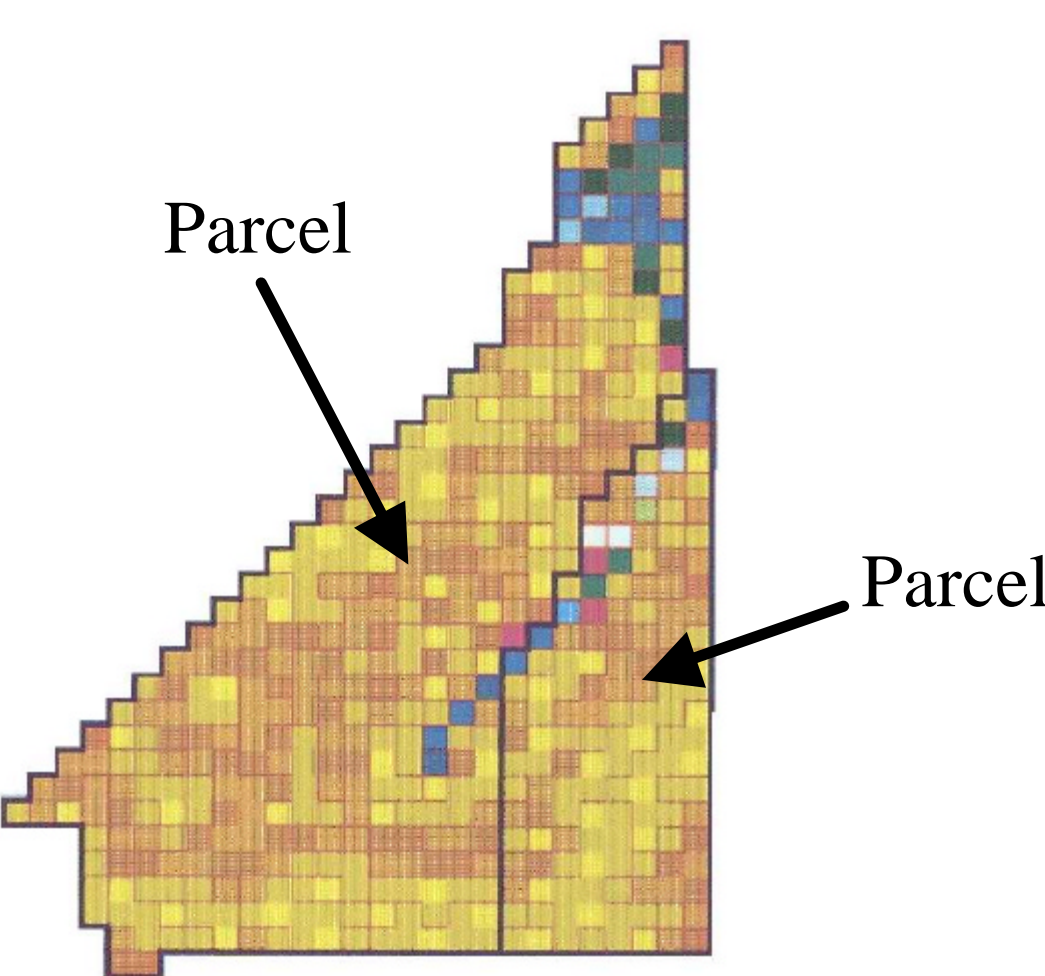
## Parcel



Parcels can be viewed as planning units. They average 25 acres in size, and are composed of BSUs.

On federal and state land, activities are considered for parcels, although the response units are the BSUs. On forest industry land, parcels are the building blocks for larger patches.

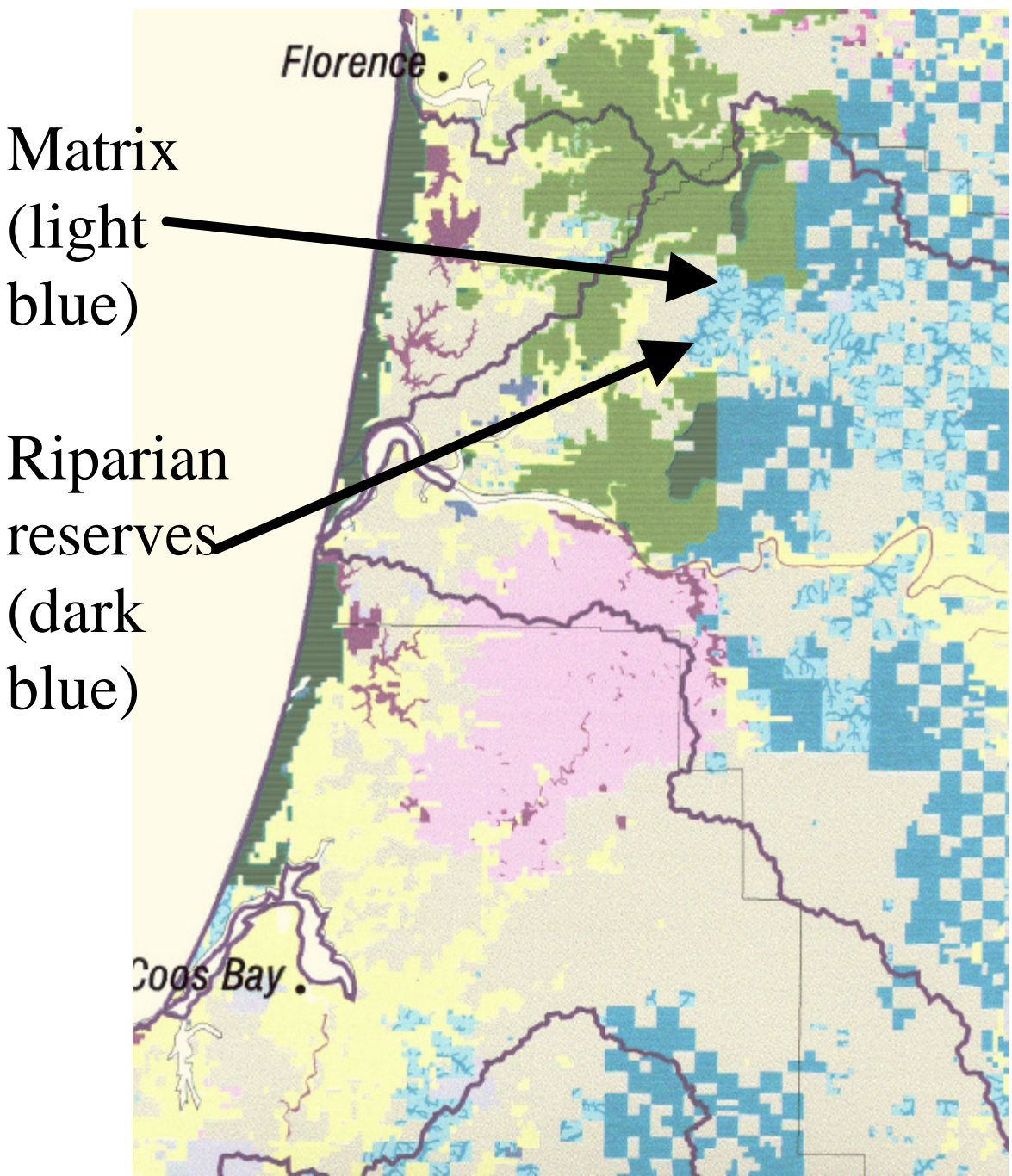
## Harvest Block



On forest industry land, we attempt to block parcels into harvest blocks for scheduling regeneration harvests. The maximum size of a harvest is 120 acres, yet we attempt to build their sizes such that they represent a distribution of block sizes based on recent (1991-1995) harvesting history. Therefore harvest block sizes can range from about 25 acres to 120 acres.

We build harvest blocks for the forest industry owner class; the blocking rules do not apply to individual ownerships.

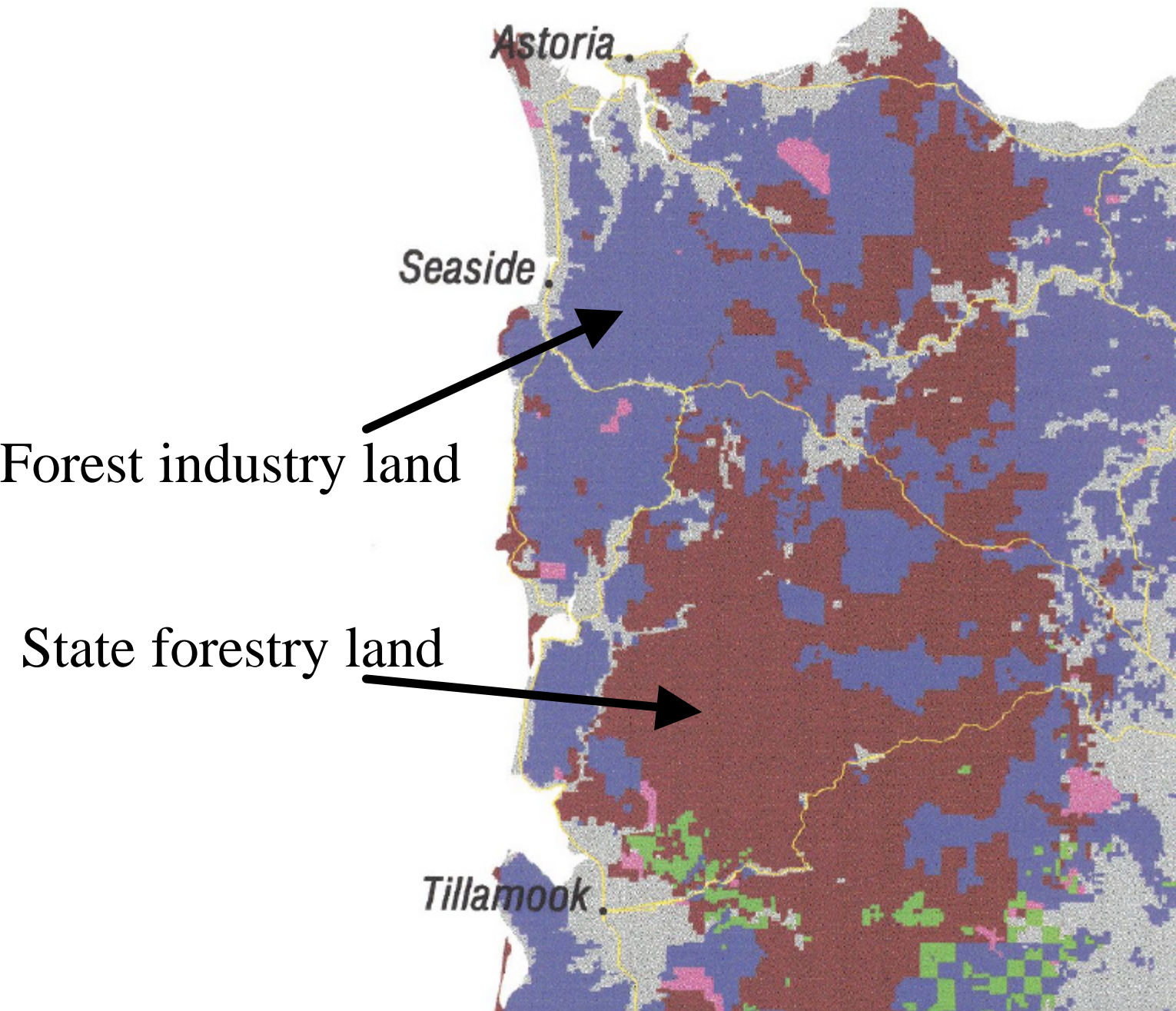
## Land Allocation



Some land allocations are defined spatially. For example, riparian reserves have a spatial definition - they are within a certain distance from the stream system generally, although other rules apply as well. The type of management activity considered for each BSU will vary, depending on which land allocation it is assigned.

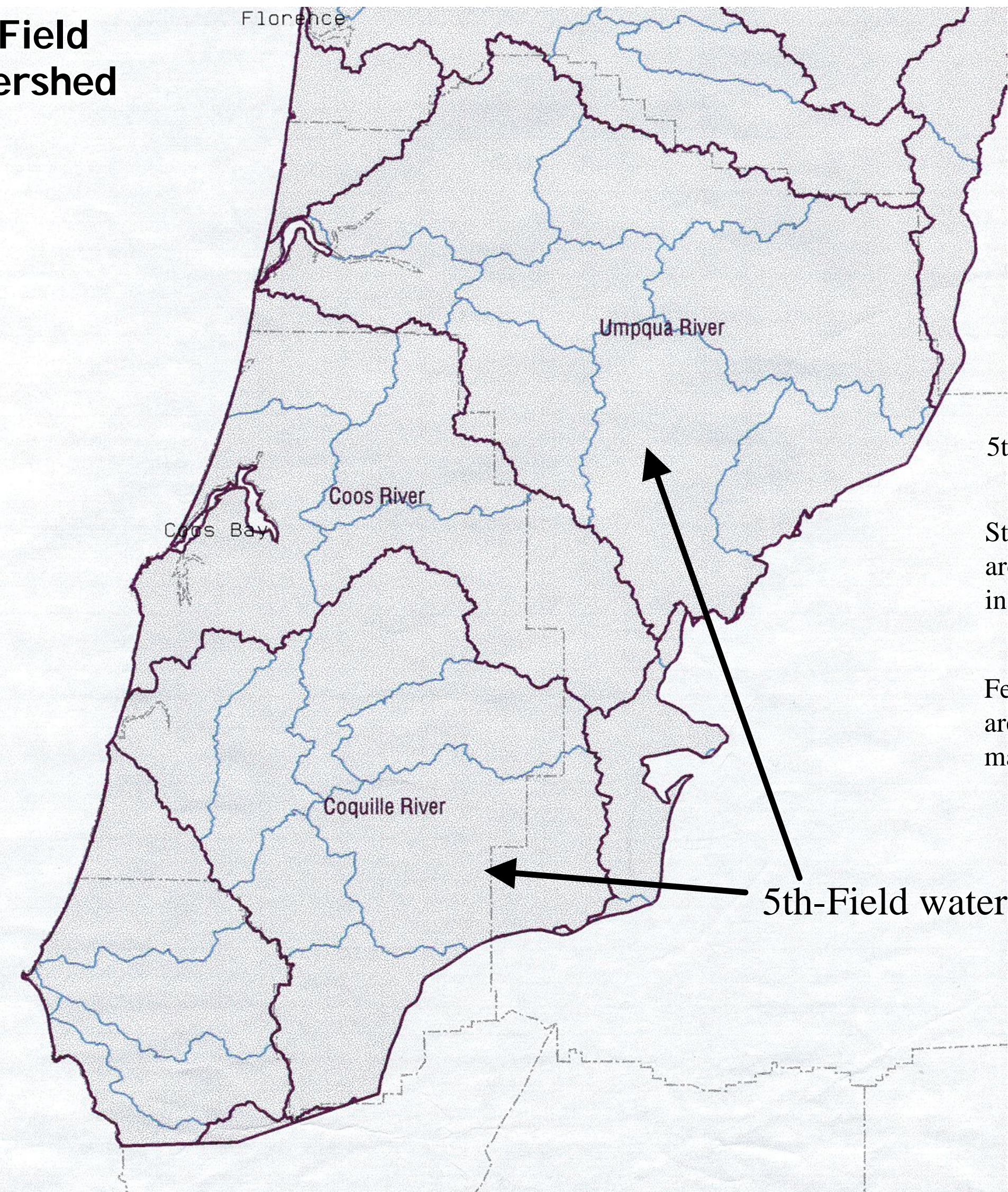
On federal land, we allow thinning in the riparian reserves. Regeneration harvests are only allowed in matrix land allocations.

## Land Ownership Class



The ownership pattern of the Coast Range has developed over time as a result of policies, events (fires), and human development. Each of the landowner class has a set of management intentions that apply only to that class. For example, a value-based management approach is applied to forest industry land, whereas stand structural goals guide decisions on state and federal land.

## 5th-Field Watershed

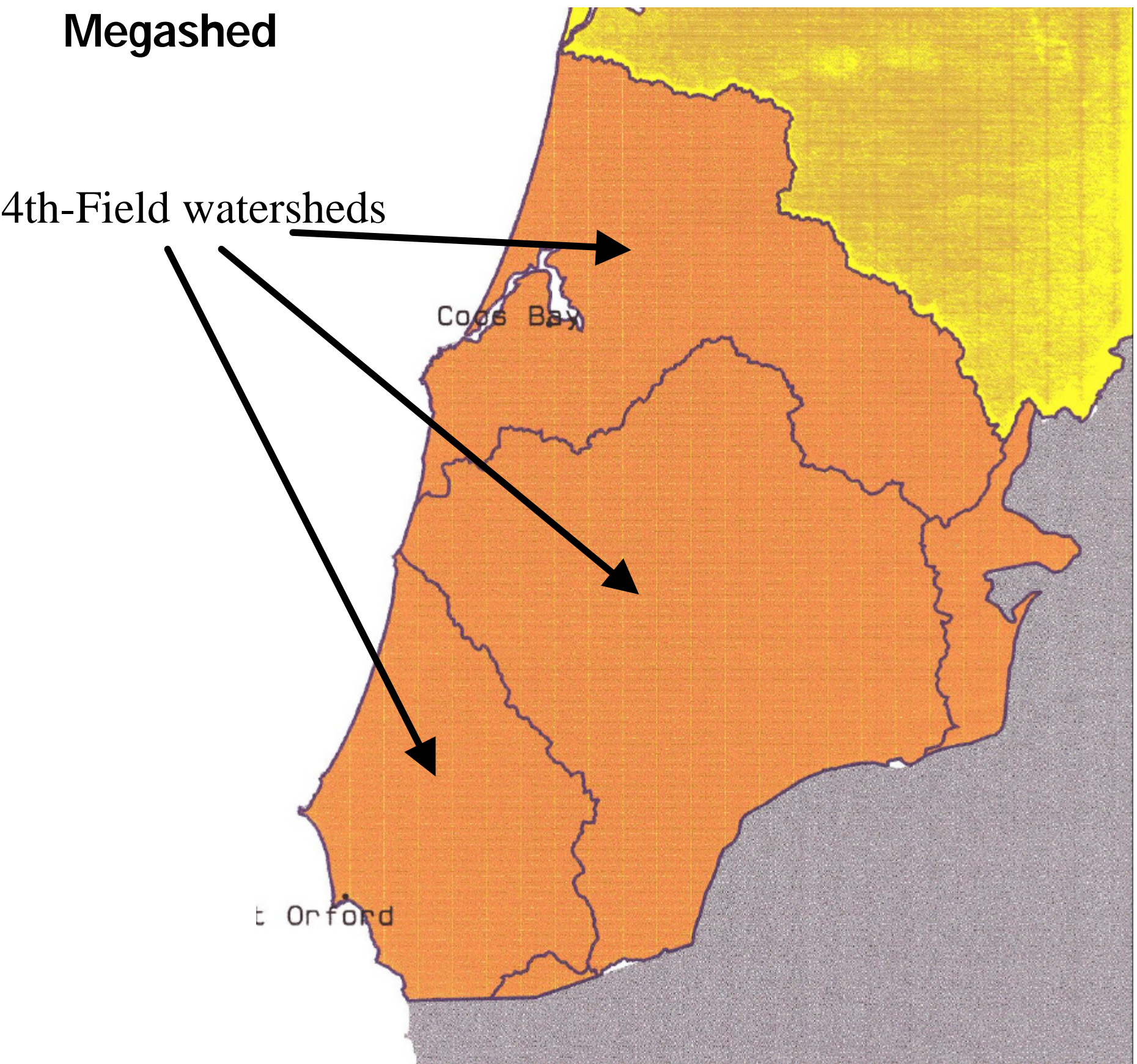


5th-Field watersheds average around 50,000 acres in size.

State management intentions for potential regeneration harvests are constrained by the amount of land in structural stage classes in these watersheds.

Federal management intentions for potential regeneration harvests are constrained by the amount of late seral forests, and amount of matrix land allocation area in these watersheds.

## Megashed



A "megashed" is a combination of two or more 4th-Field watersheds. Megasheds range in size from 1-2 million acres.

The amount of timber volume harvested from forest industry land is even, over time, in each megashed. This "even-flow" goal is applied to the forest industry landowner class, and assumes each individual firm with land in the megashed belongs to one class.