

UNIT OVERVIEW

Course	Introduction to Fire Effects, RX-310
Instructor	Mike Pruss
Unit	3 – Fire Effects and Resource Management
Lesson	C – Watersheds and Aquatic Ecosystems
Time	2 ½ Hours

Objectives

1. Identify and describe the physical, biological, and chemical components of watersheds and aquatic ecosystems
2. Identify how fire regimes influence the biological, chemical, and physical properties of watersheds and aquatic ecosystems
3. Discuss appropriate management practices for modifying first order fire effects on watersheds and aquatic ecosystems.
4. Identify key attributes of watersheds and aquatic ecosystems to evaluate the first order fire effects on watersheds and aquatic ecosystems.

Recommended Lesson Topics:

- Impacts to water quality and chemistry
- Impacts to water quantity
- Substances used for fire management which are toxic to aquatic systems (retardant, foam, herbicides, etc.)
- Exotic aquatic diseases
- T & E Species
- Legal and regulatory framework
- Exotic aquatic flora and fauna
- Aquatic organisms
- Seasonal concerns (vulnerability, response, etc.)
- Watershed dynamics
- Connection between landscape ecology and watershed ecology

Strategy

This lesson will lay the foundation for understanding the relationships between fire

regimes, watersheds and aquatic ecosystems. The underlying context of the discussion should focus on adaptive fire management and the interconnectivity of the course units. The objectives are ordered in the sequence the lesson should be presented. By the end of the unit, the student will be able to demonstrate how one might manage for desired first order effects given a realistic scenario.

Instructional Method(s)

Instructional Aids

Exercise(s)

Evaluation Method(s)