

Dr. John Loomis PUBLIC LANDS MANAGEMENT-(AREC 547) Spring 2013

OFFICE: B310 CLARK BLDG

OFFICE HOURS: MWF 1-2 and Mon 3-3:30 and by appointment at other times on MWF.

COURSE DESCRIPTION: Comparison and evaluation of natural resource management planning, policies and analytical techniques used by the U.S. Forest Service, Bureau of Land Management, National Park Service and U.S. Fish and Wildlife Service. Examine the relationship of legislation, planning system and economics in agency's management of natural resources between conflicting multiple uses. Each major topic will be introduced in a lecture to provide the framework of analysis. The chapters in the book provide more detail & technical material. Tests will draw upon both lecture and textbook.

COURSE TEXT: Integrated Public Lands Management: Principles and Applications to National Forests, Parks, Wildlife Refuges and BLM Lands, Columbia University Press, Second Edition.

Reading: Using Contingent Choice Surveys to Inform National Park Management, R. Turner. (Will be emailed to the class).

COURSE REQUIREMENTS: There will be 2-3 mid terms (collectively worth 60%) and a final examination (worth 35%) and class participation worth 5%.

First Test is scheduled for Wed Feb 27th. **Please turn cell phones off while in class.**

COURSE OUTLINE

INTRODUCTION: Integrated Natural Resource Planning & Mgmt: The Role of Analysis

Readings: Chapter 1

A. TYPES OF PUBLIC LANDS & THEIR LEGAL MANDATES: IMPLICATIONS FOR ECONOMIC ANALYSIS

1. National Forests
2. National Wildlife Refuges
3. National Parks, Monuments
4. Bureau of Land Management
5. Special Land Use Designations: Wilderness, Wild & Scenic Rivers

Readings: Chapter 2

B. RATIONALE FOR PUBLIC OWNERSHIP: Externalities & Market Failure

C. RATIONALE FOR PRIVATE OWNERSHIP: Property Rights & Self Interest

Readings: Chapter 3 including "Another View" Section at end of chapter

D. 5 CRITERIA FOR PUBLIC LAND MGMT & DECISION MAKING AIDS; MODELS IN NATURAL RESOURCES PLANNING AND MANAGEMENT

Readings: Chapters 4 and 5.

E. WILDLIFE REFUGE PLANNING:

General Principles used by agency & Refuge System Improvement Act

Readings: Chapter 11, Pages 422-451

b. Case study of Arctic National Wildlife Refuge; Readings: Ch 11, Pages 451-466

F. THEORY AND PRINCIPLES OF MULTIPLE USE MANAGEMENT

1. Defining Multiple Use, production trade-offs and values
2. A simple graphical example of linear programming models
objective function, constraints and relative values

Readings: Chapter 8.

3. Economics of Multiple Use Planning: National Economic Efficiency and Regional Economic Impacts

- a. How to value and incorporate non market values into the objective function

Readings: Pages 196-219;

b. Regional Economic Impacts: A Tool for Planning & EIS's

Readings: Chapter 7

c. Use and Abuse of Regional Economic Impacts: Jobs and Local Income as Transfers versus National Economic Efficiency Analysis

Readings: Pages 165-170.

G. MULTIPLE USE CONFLICTS AND AGENCY APPROACHES TO RESOLUTION

1. **Comprehensive and Intensive Multiple Use Planning of U.S. Forest Service**

- a. Overview of Steps in First Round NFMA Planning Process:
Determining how resources on the Forest will be managed.

Readings: Chapter 9 on USFS, pages 279 to 291.

- b. Tabular Approach to Linear Programming Optimization Models
- c. How LP models and Input-Output models are used in Forest Planning

Readings: Chapter 9 on USFS, pages 291 to 313.

- d. Case study of Siuslaw National Forest, Implementation of Forest Plans

Readings: Finish Chapter 9 on USFS

- e. **NEW Forest Planning Regulations**

2. **Extensive "Issue Oriented" Multiple Use Planning of BLM:**

- a. Steps and scope of BLM's Resource Management Plans

Readings: Chapter 10 on BLM, pages 361 to 379.

- b. Case study of San Juan Resource Mgmt Plan (Student presentation of each step)
- c. Implementation of RMP's
- d. Update on Revision to SJRMP via Ecosystem Approach
- e. Revisions to 1872 Mining Law

Readings: Finish Chapter 10 on BLM including Another View section.

Approximate Time of 2nd Mid Term Exam on Multiple Use Planning & Mgmt

H. NATIONAL PARKS AND NATIONAL MONUMENTS

1. History of National Parks purpose and early implementation
(the use versus preserve debate)
2. What to Preserve: The scenery or ecology; What to Manage For?

Readings: Chapter 12: 467-476 and 483-484

3. NPS Planning Process and Using Economics to Improve it
Readings: Pages 484-508; and Turner Using Contingent Choice Surveys...

4. National Park Case Studies

Developing Criteria For Deciding Appropriate Recreation Uses

Zion General Management Plan (Student presentations of each step)

Readings: Chapter 12 pages 508-524.

External Threats to National Parks

Potential for Interagency, Coordinated Ecosystem Planning

Example of Greater Yellowstone Ecosystem

Readings: Finish Chapter 12 (pages 524-528),

Chapter 13: Ecosystem Mgmt & Planning

Greater Yellowstone Ecosystem Again

California Bioregional Analysis; Oregon Old Growth & Owls: FEMAT

Interior Columbia Basin Ecosystem Plan

Readings: Chapter 13.

Role of Economics in Ecosystem Management

Readings: Pages 214-219.